PARKING STUDY

CITY OF NEW BRAUNFELS

NEW BRAUNFELS, TEXAS

Prepared for:
CITY OF NEW BRAUNFELS

APRIL 15, 2016

WALKER
PARKING CONSULTANTS

25-1929.00

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EXECUTIVE SUMMARY

The City of New Braunfels has experienced sustained economic growth in the last decade and is expected to continue to grow with the increasing popularity of the Austin-San Antonio corridor. In addition to realizing a significant population increase, New Braunfels supports a robust tourism market. As a result of these successes, some stakeholders have expressed concern regarding the ability of the existing parking infrastructure to support current and future demand in the downtown area. In response, the city has engaged Walker Parking Consultants (Walker) to perform a parking needs assessment of the downtown area, including a supply and demand study, a parking alternatives analysis, a review of parking policies and practices, and a preliminary financial analysis of a structured parking solution.

PARKING SUPPLY AND DEMAND ANALYSIS

EXISTING CONDITIONS

An estimated 58%, or almost 2,100, of the 3,614 parking spaces within the downtown study area were observed to be vacant or unused during the typical busiest hours. This includes significant availability in all types of spaces including on street, and off street, in both publicly- and privately-available spaces. During normal off-peak periods, the vacancies are even greater. Observed parking occupancies are some of the lowest rates recorded by Walker in a downtown. Based on these results, this suggests a regular abundance of parking in downtown New Braunfels.

Occasionally, it may be difficult for users to locate parking on a handful of selected blocks that are located near the downtown square and Comal County Courthouse. In these cases, users may have to walk a couple of block faces or a block or two from their parking spot to their final destination and back. A parking structure could be developed to address these occasional occurrences and also to support future development projects.

Walker surveyed a 24-block area in downtown New Braunfels on Thursday, January 7th, 2016 and Saturday, January 9th, 2016 to confirm the available parking supply and observe parking space occupancy rates. Additionally, Walker personnel visited New Braunfels again on Wednesday, January 27th and found similar circumstances. The following are our key field observations:

- An estimated 3,614 parking spaces were identified within the downtown study area, including 2,727 privately-available spaces and 887 publicly-available parking spaces.
- Peak weekday parking occupancy was observed to occur around 2 p.m. when approximately 1,500 spaces or 42% of the available parking supply was occupied.
- During weekend conditions, peak parking demand was observed at 6 p.m. when 1,017 spaces or 28% of the available parking supply was occupied.
- The significant vacancies are not limited to privately-owned or privately-available spaces. Significant vacancies were observed in the publicly-available parking spaces. Specifically, of the 887 public spaces, 612 spaces were vacant during the observed 2 p.m. typical peak hour.

To account for a summertime increase in parking demand, the observed parking occupancy figures were adjusted upward to better represent Design Day conditions and account for higher seasonal parking demand. Weekday and weekend parking demand observations were increased by around 15% and 23%, respectively. After applying these adjustments, we would expect a 48% occupancy rate during peak weekday design conditions and a 34% occupancy rate during peak weekend design conditions. Both of these occupancy rates are well below the threshold of an overall downtown parking shortage.

The time frame of this study's commissioning is such that parking conditions could not be surveyed during the summer tourism season. However, if parking demand doubles in the summer – which based on our professional judgment and experience is highly unlikely -- there are still sufficient numbers of existing spaces to accommodate demand.

FUTURE CONDITIONS

Future parking demand was projected by taking baseline existing conditions and adding incremental growth from the following two sources: a) identified and known proposed redevelopment projects; and b) an assumed baseline demand growth rate of 3% per annum.

When projecting the parking demand associated with proposed redevelopment projects, Walker utilized ULI parking demand ratios that are higher than those associated with observed actual parking demand conditions in downtown New Braunfels. This methodology results in demand for an additional 375± spaces during a typical weekday to 500± spaces on the weekend.

New Development Assumptions

Background Parking Demand Growth Rate: 3% per year, compounded annually

+

Identified and Known Redevelopment Projects:

Block	Development	Land Use	Size[1]	Unit
15	208 S Castell	Fine/Casual Restaurant	7,400	Square Feet
		Office	2,000	Square Feet
15	148 S Castell	Fine/Casual Restaurant	10,200	Square Feet
15	290 S Castell	Office	13,213	Square Feet
8	386 San Antonio	Entertainment	3,840	Square Feet
		Fine/Casual Restaurant	13,500	Square Feet

Assuming both the 3% annual growth in background parking demand and the 375-500 space demand as a result of known redevelopment projects, future parking adequacy is projected as follows:

- By 2021, a typical peak weekday parking demand of 2,146 spaces or 59% occupancy is expected when compared to the available supply of 3,614 spaces.
- Over a ten-year planning horizon which extends through, 61% of the available parking spaces are expected to be occupied (2,204 of the 3,614 available spaces).

During typical peak weekend conditions, the downtown is expected to experience a 49% parking space occupancy rate in the next five years. The projected parking space occupancy rate is projected to increase to 51% by 2026 during typical peak hours. While most blocks are expected to have an adequate supply to support future demand, parking "hot spots" are expected. This is particularly true on Blocks 8 and 15, where several major redevelopment projects including the Gerlich Building, both vacant parcels adjacent to the Coop, and the Friesenhaus, are anticipated to generate significant future demand. The table below summarizes current and future parking demand and adequacy by type.

		Weekday				Weekend			
		Survey	Design	2021	2026	Survey	Design	2021	2026
On-Street	Supply	743	743	743	743	743	743	743	743
	Effective Supply	632	632	632	632	632	632	632	632
	Demand	231	264	306	355	197	239	277	321
	Occupancy	31%	36%	41%	48%	27%	32%	37%	43%
	Adequacy	401	368	326	277	435	393	354	310
Public Off-Street	Supply	144	144	144	144	144	144	144	144
	Effective Supply	130	130	130	130	130	130	130	130
	Demand	44	50	58	67	22	27	31	36
	Occupancy	31%	35%	40%	47%	15%	19%	22%	25%
	Adequacy	86	80	72	62	108	103	98	93
Private Off-Street	Supply	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727
	Effective Supply	2,591	2,591	2,591	2,591	2,591	2,591	2,591	2,591
	Demand	1,225	1,408	1,782	1,782	798	979	1,475	1,475
	Occupancy	45%	52%	65%	65%	29%	36%	54%	54%
	Adequacy	1,366	1,183	809	809	1,793	1,612	1,116	1,116
Total	Supply	3,614	3,614	3,614	3,614	3,614	3,614	3,614	3,614
	Effective Supply	3,352	3,352	3,352	3,352	3,352	3,352	3,352	3,352
	Demand	1,500	1,722	2,146	2,204	1,017	1,245	1,783	1,832
	Occupancy	42%	48%	59%	61%	28%	34%	49%	51%
	Adequacy	1,852	1,630	1,206	1,148	2,335	2,107	1,568	1,519

PARKING POLICIES AND PRACTICES

Prior to building any new public parking in downtown New Braunfels, Walker recommends the City consider changes to current parking policies and practices. The proposed changes are intended to help improve the overall delivery of parking services. These recommendations are based on input from stakeholders directly impacted by public parking policy and practices. In addition, the recommendations reflect Walker's analysis of current and future parking

conditions, and assessment of current operations. The following is a summary of these recommendations:

- **Enforcement**
  - Upgrade existing enforcement equipment to create efficiency and better record-keeping; switch from manual ticket-writing to tickets issued through handhelds.
  - Enforce parking time limits on a zonal basis instead of on a space-by-space basis. (This action mitigates the practice of long-term parking patrons moving their vehicles every two hours to avoid receiving a parking citation for overtime parking, by pulling into another nearby, short-term parking space, instead of simply storing the vehicle in a space intended for long-term use.)
  - Consider extending enforcement hours to include evenings and weekends to ensure turnover of prime parking spaces.
- **Demand Management**
  - Provide additional long-term parking options for employees and market the availability and location of these spaces to downtown stakeholders.
  - Advocate for and negotiate shared parking agreements between multiple private property owners and private property owners and the city. If required, be willing to compensate private property owners for making their parking available to the general public by either leasing their parking lot or by offering financial compensation (much less expensive than building a new parking structure).
- **Planning/Zoning**
  - Amend the parking element of the zoning ordinance to require developers to submit a parking plan as part of the overall site-plan for City Planner approval.
  - Review and revise minimum parking requirements for the downtown.
  - Revise the two-hour time limit zones; increase some on-street parking to a three-hour time limit.
- **Signage, Wayfinding, and Marketing**
  - Improve parking signage package including restriping on-street spaces, upgrades to pole signage, and installation of wayfinding signage throughout downtown.
  - Implement a continuous improvement model.
  - Implement parking planning workshops with local businesses, city government, and other stakeholders.
  - Create and implement a regular marketing and public relations program aimed at educating stakeholders about parking options and disproving myths about downtown parking.

Additional detail regarding these recommended improvements is provided within the body of this plan document.

ALTERNATIVES ANALYSIS

Walker considered several options to increase the available public parking supply in the downtown area, including restriping and/or reconfiguring existing public lots, developing structured parking, and expanding and implementing shared parking arrangements. While the overall downtown area is not expected to experience a parking shortage over the next ten-year planning horizon, the redevelopment on Blocks 8 and 15 is expected to generate significant parking demand increases, resulting in a deficit of approximately 300 spaces during typical peak conditions on those two blocks. The table below summarizes the options.

ALTERNATIVE	*NET SPACE GAIN*	*COST*
Restripe the existing public/private parking lot on Block 4 and seek a more official shared parking policy between the City/County and the general public	Net gain of 4 spaces Existing: 74 Proposed: 78	$2,730
Reconfigure the existing public parking lot on Block 2 as a two-bay parking lot with 90° spaces	Net gain of 22 spaces Existing: 41 Proposed: 63	$2,585
Expand and reconfigure the existing public parking lot of Block 2 as a three-bay parking lot with 90° spaces	Net gain of 50 spaces Existing: 41 Proposed: 91	$128,585
Demolish a portion of the existing Coop building in order to expand/reconfigure surface lot	Net gain of 119 spaces Existing: 16 Proposed: 135	$373,725**
Option 1 - Develop an approximately 460-space, 3.5-level parking garage on Block 16 on the existing 114-space private parking lot behind the Chase Bank	Net gain of 346 spaces Existing: 114 Proposed: 460	$7,820,000 to $9,660,000**
Option 1A - Develop an approximately 460-space, 3.5-level parking garage on Block 16 with approximately 32,600 SF of ground floor retail on the existing 114-space private parking lot behind the Chase Bank	Net gain of 426 spaces Existing: 114 Proposed: 540	$9,180,000 to $11,340,000**
Option 2 - Develop an approximately 245-space, 2-level (one supported tier) parking garage on Block 16 on the existing 114-space private parking lot behind the Chase Bank	Net gain of 131 spaces Existing: 114 Proposed: 245	$4,165,000 to $5,145,000**
Option 3 - Develop an approximately 495-space, 4-level parking garage on Block 16 on the existing 114-space private parking lot behind the Chase Bank without demolishing the existing historic building	Net gain of 381 spaces Existing: 114 Proposed: 495	$10,395,000 to $12,375,000**
Option 3A - Develop an approximately 500-space, 4-level parking garage on Block 16 with approximately 16,410 SF of ground floor retail on	Net gain of 386 spaces Existing: 114 Proposed: 500	$10,500,000 to $12,500,000**

the existing 114-space private parking lot behind the Chase Bank without demolishing the existing historic building		
Option 4 - Develop an approximately 460-space, 3.5-level parking garage on Block 16 on the existing 114-space private parking lot behind the Chase Bank	Net gain of 355 spaces Existing: 105 Proposed: 460	$7,820,000 to $9,660,000**
Pursue shared parking opportunities with existing privately-owned parking facilities to more effectively utilize the existing parking supply	Variable. No new spaces built, but private supply would be officially designated as public	Variable.

***Excluded the cost associated with land/building acquisition, environmental remediation that may or may not be needed, utility relocation costs, geotechnical engineering impacts, demolition costs, and other soft costs such as design or financing fees.*

The restriping, reconfiguration, and expansion projects are recommended as these could be readily implemented to gain an estimated 76 spaces for less than $150,000. Walker also recommends that the City facilitate shared parking agreements between private property owners, plus arrangements with the city. These exist today, i.e., the city has an agreement with First Protestant Church. We recommend additional agreements as these can cost effectively open up privately-owned parking to public use.

FINANCIAL ANALYSIS

The finances of a potential 460-space parking structure located on the Chase Bank site were evaluated to help inform decision makers on the viability of this potential solution. This 3.5-level facility would cost $10 million or more to build; this excludes land costs. Operating expenses are estimated to cost $150,000 or more annually. A structural reserve fund is recommended for capital repairs and the annual cost of this set aside is estimated at $35,000. Debt service on the facility would likely be $607,000 or more annually.

The revenue potential of a parking structure was evaluated. Potential revenues are estimated at around $350,000 annually and assume that the proposed restaurants and offices to be located on the 100 and 200 blocks of South Castell and the 300 block of San Antonio, would be developed, In total, these developments represent more than 50,000 square feet of development. Significant numbers of additional cars would likely be generated by these developments. The potential revenues assume a $1 hourly rate up to a $5 daily maximum and a $40 monthly rate.

Revenues would not be sufficient to cover operating expenses, debt service, and capital expenses. An annual deficit of around $450,000 or more could be expected initially.

The most likely options for the city to fund a parking structure include using taxes or fees from a Business Improvement District ("BID") or the city's general fund.

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INTRODUCTION

The City of New Braunfels, Texas (the "City") retained Walker ("Walker") to evaluate the current parking supply and demand in its downtown, project future parking demand and adequacy, perform an alternatives analysis, discuss potential management and operations improvements, and provide a financial plan. The purpose of the study is to provide a quantitative evaluation of the current and future parking adequacy that clearly identifies the parking inventory, utilization and availability in New Braunfels, while providing insight on how the current inventory may be used more efficiently and whether additional supply is warranted. The following scope of work was mutually agreed upon by Walker and the City.

SCOPE OF SERVICES

TASK 1 – PARKING SUPPLY/DEMAND STUDY

1. Meet with New Braunfels Industrial Development Corporation (Client) representatives to finalize project parameters, review project background and obtain previous reports, area maps, and other background information.
2. Obtain and review land use data within the study area, provided in terms of square footage by land-use type (i.e. retail, restaurant, hotel, office, etc.)
3. Conduct parking inventories of on- and off-street parking within the study area. Inventories will include space counts, rates, and restrictions.
4. Conduct parking occupancy counts of parking in the study area on a weekday and on a weekend. (Client will assist in counts)
5. Create a parking demand model using Walker Parking Consultant's shared parking model to project typical parking demand throughout a weekday.
6. Calibrate the demand model to reflect observed conditions, thus calculating parking demand ratios for the land uses present.
7. Determine the surplus or shortfall within the area under current conditions, and create tabular and graphic illustrations of the parking system adequacy.
8. Obtain build-out plans from the Client and adjust the demand model to show future parking demand generated by approved and/or proposed developments in the area.
9. Facilitate a stakeholder meeting during the data collection trip. Client will arrange and coordinate with appropriate stakeholders (as identified by the Client).

TASK II – PARKING ALTERNATIVES ANALYSIS

1. Review inventory, utilization and turnover data collected in TaskI.
2. If data suggests imbalances of usage, recommend management and policy changes that could reduce congestion in affected areas.
3. Review existing vehicular and pedestrian access and circulation patterns for their relationship to existing and proposed parking facilities/lots.
4. Determine whether the number of spaces could be increased through efficiency improvements in existing facilities/lots.
5. Determine whether any existing facilities/lots can be expanded to meet area parking needs.

6. Identify potential locations for new parking facilities (surface and/or structured). External variables that will be considered are desirable density, phasing of construction, and incorporation of other uses (such as retail) in any proposed facility.
7. Determine an order of magnitude project cost including estimated operational expenses to enable a comparison of the costs of each alternative on an "apples to apples" basis.
8. Evaluate the various alternatives on the basis of qualitative criteria to be mutually agreed upon with the Client. A weighted matrix will be used to achieve more objectivity and to rank the alternatives.
9. Meet with the client via teleconference to discuss the conceptual designs of any potential new parking facilities (if needed) and present the matrix analysis to agree upon weighting and other considerations.
10. Develop a recommended plan for improvements, including phasing of components corresponding to projected needs.

TASK III – REVIEW OF PARKING POLICIES AND PRACTICES

1. Identify for the Client's consideration, other customer-service enhancements that do not exist in the City. Obtain and review city parking policies, practices, and ordinances relating to parking.
2. Review and comment on parking rates, time restrictions or lack thereof, and enforcement hours.
3. Review existing parking equipment and recommend upgrades where necessary.
4. Recommend modifications to the parking element of the City's zoning ordinance that align with its downtown parking plan.
5. Review and comment on existing parking signage downtown and identify opportunities for improvement.

TASK IV – FINANCIAL PLAN

1. Meet with Client representatives to determine study objectives, boundaries, procedures and project schedule.
2. Using Walker's database of operating expenses (collected periodically from more than 200 parking facilities), project annual operating expenses for a five-year period, including but not limited to:
   A. Direct labor (cashiering, supervision, accounting, maintenance, and security) and fringe benefits;
   B. Utilities;
   C. Supplies;
   D. Daily maintenance (contracts and equipment); and
   E. Structural maintenance (a sinking fund for periodic major expenses).
3. Using our past experience, project construction costs, contingency costs, consulting fees, financing costs, Walker will project the initial cost of additional parking. The Client will be asked to assist in providing interest rate and term of loan inputs.
4. Research comparable market parking rates and recommend a rate structure for City-owned parking.
5. Based on the findings of Task I and the recommended rate structure, project the annual net operating income for parking considering a 10- and 20-year period.

DEFINITION OF TERMS

Several terms or jargon are used in this report that have unique meanings when used in the parking industry. To help clarify these terms and enhance understanding by the reader, the following definitions are presented.

- **Adequacy** - The difference between the effective parking supply and parking space demand.
- **Design Day** - The day that represents the level of parking demand that the parking system is designed to accommodate. In most of the thousands of parking studies that we have conducted, this level of activity is typically equal to the 85th to 95th percentile of absolute peak activity. Although we will occasionally design to a higher-than-typical design standard, such as one exceeded less than one day per month or even the absolute peak level of demand, we do not typically design to these extreme conditions because the result is an abundance of spaces that remain unused most of the time.
- **Effective Supply** - The total supply of parking spaces, adjusted to reflect the cushion needed to provide for vehicles moving in and out of spaces, spaces unavailable due to maintenance, and to reduce the time necessary for parking patrons to find the last few available spaces. The effective supply varies as to the user group and type of parking, but typically the effective supply is 85 percent to 95 percent of the total number of spaces. The adjustment factor is known as the Effective Supply Factor.
- **Inventory** - The total number of marked parking spaces within the Study Area.
- **Parking Generation** - The peak accumulation of parked vehicles generated by the land uses present under any given set of conditions.
- **Patron or User** - Any individual parking in a study area.
- **Peak Hour** - The peak hour represents the busiest hour of the day for parking demand.
- **Survey Day** - The day that occupancy counts within a study area are recorded. This day should represent a typical busy day.

SUPPLY AND DEMAND ANALYSIS

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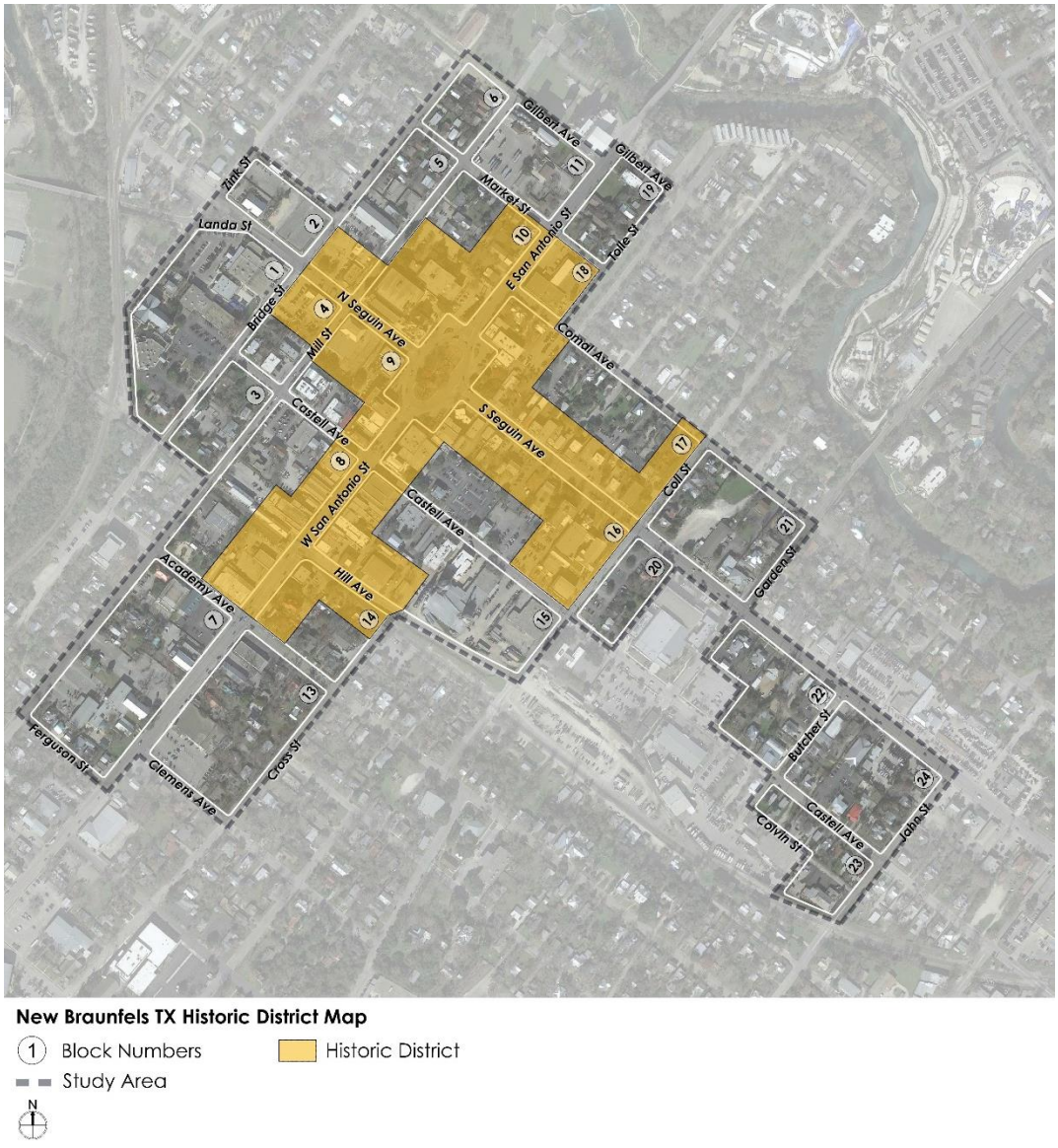
SUPPLY AND DEMAND ANALYSIS

STUDY AREA

The client identified a 24-block Study Area as the focus of this study. The Study Area is generally bounded by Gilbert Avenue and Camal Avenue to the north, Tolle Street/John Street/Cross Street to the east, Hill Avenue and Guenther Avenue to the south, and Mill Street/Zink Street/Bridge Street to the west. The figure on the following page depicts the Study Area, including the historic district.

Figure 1: Study Area



Source: Google, 2016

PARKING SUPPLY

The foundation of a parking supply and demand study is an inventory of the existing parking supply. Parking in the Study Area is available in several forms. On-street parking is offered at no charge. On-street parking was observed as typically being signed with clearly–marked usage restrictions. Off-street parking is available to the public in lots, which are both publicly- and privately-owned facilities. Private parking is available for specific user groups in lots and is often restricted for use by individual businesses.

The inventory is compared to the parking demand to quantify the existence of a parking surplus or deficit. A surplus exists when the supply exceeds the demand; a deficit exists when the supply is inadequate to meet the demand. We conducted this analysis on a block-by-block basis within the Study Area, segmenting the demand by block.

Based on the data collected, there are a total of 3,614± spaces in the Study Area. Following is a breakdown of these spaces: 743± are on-street and 2,871± are off-street. Of the off-street spaces, 144± are open to the public and 2,727± are private or restricted-use spaces. The table below summarizes the parking supply by block. Publicly-available off-street parking facilities are located on blocks 2, 4, 15, and 16; however the lots on Blocks 15 and 16 are leased or owned by the City. Conversely, the County garage on Block 10 was recorded as private parking, as access is restricted to county employees only.

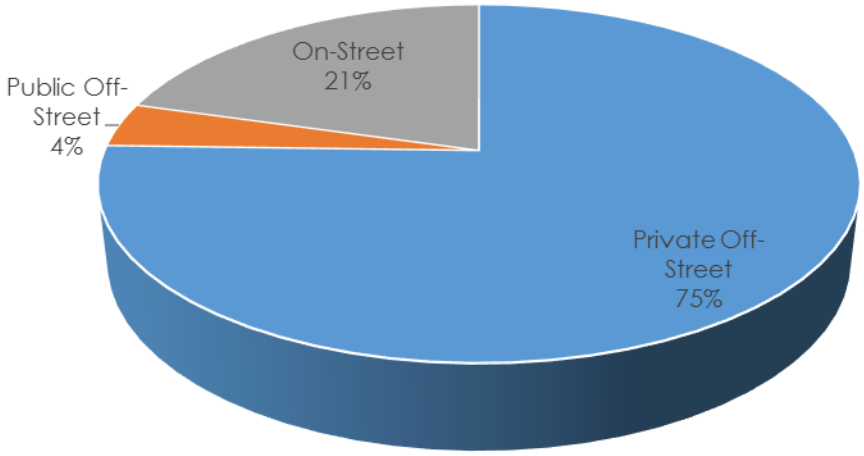
Table 1: Parking Supply Summary

Block	Private Off-Street	Public Off-Street	On-Street	Total
1	247	0	10	257
2	84	42	25	151
3	38	0	25	63
4	70	22	28	120
5	94	0	39	133
6	0	0	16	16
7	252	0	37	289
8	217	0	56	273
9	63	0	47	110
10	328	0	46	374
11	40	0	11	51
13	118	0	50	168
14	72	0	31	103
15	166	13	69	248
16	256	67	65	388
17	253	0	79	332
18	35	0	20	55
19	11	0	23	34
20	97	0	16	113
21	81	0	18	99
22	81	0	13	94
23	23	0	4	27
24	101	0	15	116
Total	**2,727**	**144**	**743**	**3,614**

Source: Walker Parking Consultants, 2016

Figure 2 shows the total parking supply by type. The largest percentage of available parking in the Study Area is located in private off-street surface lots. Privately-owned and restricted parking accounts for nearly three quarters of the available parking in the downtown area.

Figure 2: Parking Supply by Type



Source: Walker Parking Consultants, 2016

EFFECTIVE PARKING SUPPLY

The inventory of parking within the Study Area is adjusted to allow for a cushion necessary for vehicles moving in and out of spaces, and to reduce the time necessary to find the last few remaining spaces when the parking supply is nearly full. We derive the effective supply by deducting this cushion from the total parking capacity. The cushion allows for vacancies created by restricting parking spaces to certain users (reserved spaces), misparked vehicles, minor construction and debris removal. A parking supply operates at peak efficiency when parking occupancy, including both transient and monthly parking patrons, is 85 percent to 95 percent of the supply. When occupancy exceeds this level, patrons may experience delays and frustration while searching for a space. Therefore, the parking supply may be perceived as inadequate even though there are some spaces available in the parking system.

As a result, the effective supply is used in analyzing the adequacy of the parking system rather than the total supply or inventory of spaces. Following are some factors that affect the efficiency of the parking system:

- Capacity – Large, scattered surface lots operate less efficiently than a more compact facility, such as a parking structure, which offers consolidated parking in which traffic generally passes more available parking spaces in a more compact area. Moreover, it is more difficult to find the available spaces in a widespread parking area than a centralized parking facility.
- Type of users – Monthly or regular parking patrons can find the available spaces more efficiently than infrequent visitors because they are familiar with the layout of the parking facility and typically know where the spaces will be available when they are parking.

- On-street vs. off-street – On-street parking spaces are less efficient than off-street spaces due to the time it takes patrons to find the last few vacant spaces. In addition, patrons are typically limited to one side of the street at a time and often must parallel park in traffic to use the space. Many times on-street spaces are not striped or are signed in a confusing manner, thereby leading to lost spaces and frustrated parking patrons.

The size of the cushion is dependent on the type of user and facility. On-Street parking is adjusted by an 85 percent effective supply factor (ESF), because of the relative difficulty of finding an open space while negotiating traffic. Public off-street parking is adjusted by a 90 percent ESF to account for user unfamiliarity and the challenges of safely navigating the area while searching for a space. Private off-street parking is adjusted by a 95 percent ESF because employees or repeat users are familiar with the area and generally park in the same location each day. The Study Area contains a total of 3,614± spaces before any adjustments are made to account for an effective supply. After the effective supply factor is applied to the overall supply numbers, the Study Area's effective supply is 3,352± spaces, as shown in Table 2.

Table 2: Effective Parking Supply Summary

Block	Private Off-Street Supply	Effective Supply Factor	Private Effective Supply	Public Off-Street Supply	Effective Supply Factor	Public Effective Supply	On-Street Supply	Effective Supply Factor	Effective On-Street Supply	Total Effective Supply
1	247	95%	235	0	90%	0	10	85%	9	243
2	84	95%	80	42	90%	38	25	85%	21	139
3	38	95%	36	0	90%	0	25	85%	21	57
4	70	95%	67	22	90%	20	28	85%	24	110
5	94	95%	89	0	90%	0	39	85%	33	122
6	0	95%	0	0	90%	0	16	85%	14	14
7	252	95%	239	0	90%	0	37	85%	31	271
8	217	95%	206	0	90%	0	56	85%	48	254
9	63	95%	60	0	90%	0	47	85%	40	100
10	328	95%	312	0	90%	0	46	85%	39	351
11	40	95%	38	0	90%	0	11	85%	9	47
13	118	95%	112	0	90%	0	50	85%	43	155
14	72	95%	68	0	90%	0	31	85%	26	95
15	166	95%	158	13	90%	12	69	85%	59	228
16	256	95%	243	67	90%	60	65	85%	55	359
17	253	95%	240	0	90%	0	79	85%	67	308
18	35	95%	33	0	90%	0	20	85%	17	50
19	11	95%	10	0	90%	0	23	85%	20	30
20	97	95%	92	0	90%	0	16	85%	14	106
21	81	95%	77	0	90%	0	18	85%	15	92
22	81	95%	77	0	90%	0	13	85%	11	88
23	23	95%	22	0	90%	0	4	85%	3	25
24	101	95%	96	0	90%	0	15	85%	13	109
Total	**2,727**	**95%**	**2,591**	**144**	**90%**	**130**	**743**	**85%**	**632**	**3,352**

Source: Walker Parking Consultants, 2016

PARKING OCCUPANCY - WEEKDAY

To determine the parking patterns of patrons in the Study Area, the usage of a majority of parking facilities located in the Study Area was evaluated. An understanding of these parking patterns helps define both patron types and parking locations. Occupancy counts were taken for on- and off-street parking spaces on Thursday, January 7, 2016. Five counts were taken at 10:00 a.m., 12:00 p.m., 2:00 p.m., 5:30 p.m., and 7:00 p.m.

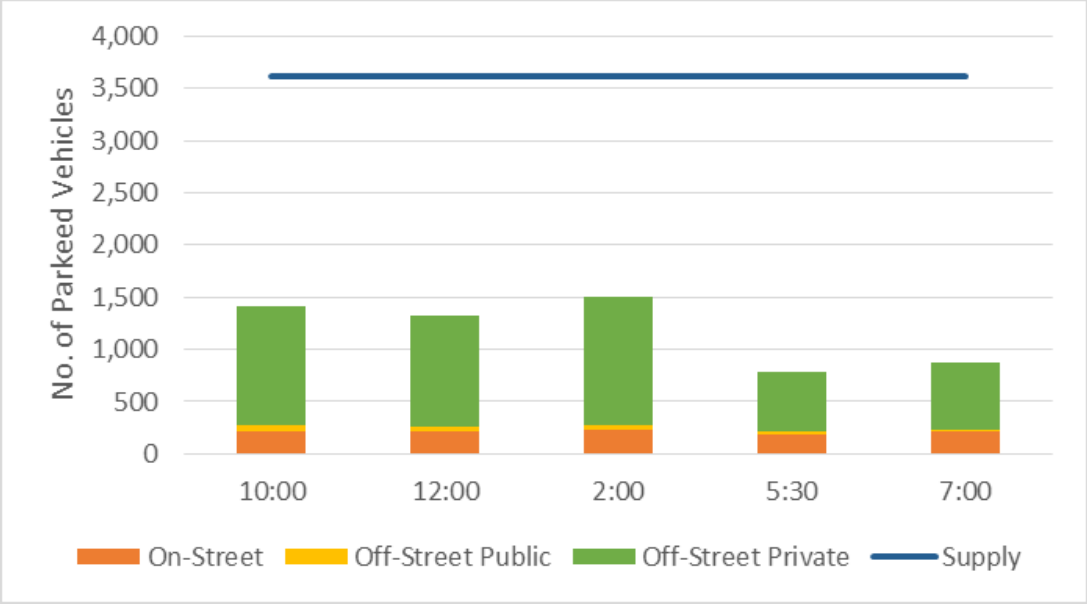
The following table and figure summarize the observed occupancy rates for on-street and off-street parking on a weekday.

Table 3: Weekday Parking Occupancy Summary

Type	Supply	10:00	%	12:00	%	2:00	%	5:30	%	7:00	%
On-Street	743	222	30%	221	30%	231	31%	192	26%	213	29%
Off-Street Public	144	50	35%	44	31%	44	31%	30	21%	23	16%
Off-Street Private	2,727	1,144	42%	1,060	39%	1,225	45%	560	21%	633	23%
Total	**3,614**	**1,416**	**39%**	**1,325**	**37%**	**1,500**	**42%**	**782**	**22%**	**869**	**24%**

Source: Walker Parking Consultants, 2016

Figure 3: Weekday Parking Occupancy Summary

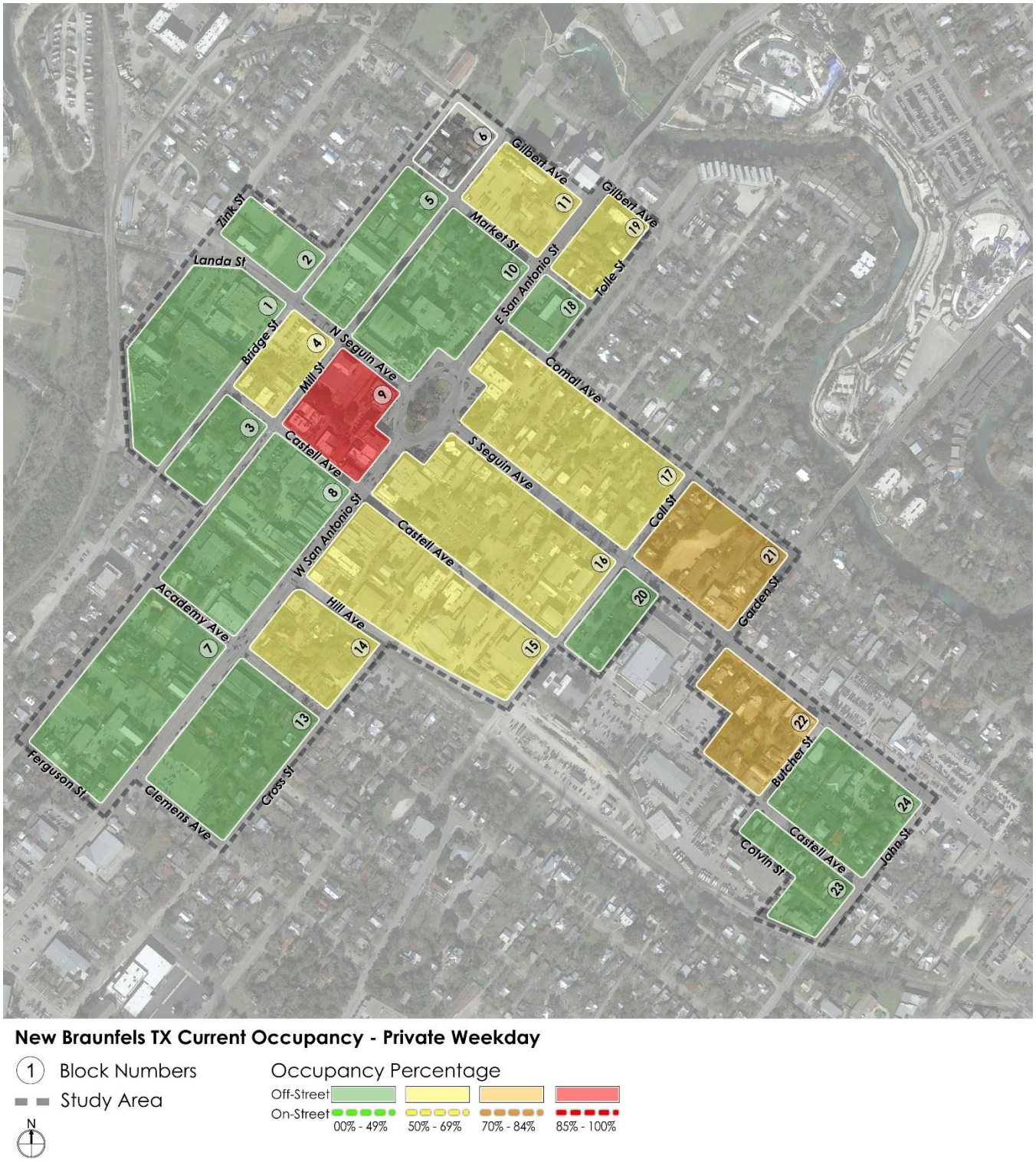


Source: Walker Parking Consultants, 2016

Occupancy rates as a whole do not indicate a shortage of parking. Peak parking demand was observed around 2:00 p.m. with approximately 1,472 occupied spaces, or 41% of the overall supply. Private off-street spaces were occupied at a slightly higher percentage than the other land uses.

The figure below shows the parking occupancy by block.

Figure 4: Weekday Parking Occupancy – Private Off-Street



Source: Walker Parking Consultants, 2016

Figure 5: Weekday Parking Occupancy – Public Off-Street and On-Street

Source: Walker Parking Consultants, 2016

The next three tables illustrate the observed weekday occupancy for on-street, public off-street, and private off-street parking by block.

Table 4: Weekday Parking Occupancy Summary – On-Street

Block	Supply	10:00 AM	12:00 PM	2:00 PM	Percentage	5:30 PM	7:00 PM
1	10	6	5	5	50%	3	2
2	25	4	0	3	12%	1	0
3	25	14	12	8	32%	15	19
4	28	17	17	16	57%	5	16
5	39	19	12	13	33%	4	3
6	16	0	2	1	6%	2	3
7	37	5	1	4	11%	10	7
8	56	20	26	14	25%	25	30
9	47	27	35	36	77%	38	45
10	46	23	22	25	54%	4	4
11	11	0	0	0	0%	0	2
13	50	11	8	8	16%	7	10
14	31	19	16	13	42%	9	12
15	69	6	14	18	26%	15	20
16	65	19	20	19	29%	27	30
17	79	8	4	14	18%	13	4
18	20	1	1	1	5%	0	0
19	23	3	6	5	22%	9	3
20	16	2	2	2	13%	0	0
21	18	1	2	3	17%	0	0
22	13	7	5	8	62%	2	0
23	4	3	4	2	50%	1	2
24	15	7	7	13	87%	2	1
Total	**743**	**222**	**221**	**231**	**31%**	**192**	**213**

Source: Walker Parking Consultants, 2016

Generally, on-street parking occupancy during the peak hour ranged from 0% on Block 11 to 87% on Block 24. Most blocks did not experience an occupancy rate above 50%. Occupancy rates at these levels do not indicate a parking problem.

Table 5: Weekday Parking Occupancy Summary – Public Off-Street

Block	Supply	10:00 AM	12:00 PM	2:00 PM	Percentage	5:30 PM	7:00 PM
1	0	0	0	0	0%	0	0
2	42	0	3	4	10%	0	0
3	0	0	0	0	0%	0	0
4	22	19	17	16	73%	4	5
5	0	0	0	0	0%	0	0
6	0	0	0	0	0%	0	0
7	0	0	0	0	0%	0	0
8	0	0	0	0	0%	0	0
9	0	0	0	0	0%	0	0
10	0	0	0	0	0%	0	0
11	0	0	0	0	0%	0	0
13	0	0	0	0	0%	0	0
14	0	0	0	0	0%	0	0
15	13	8	2	2	15%	4	4
16	67	23	22	22	33%	22	14
17	0	0	0	0	0%	0	0
18	0	0	0	0	0%	0	0
19	0	0	0	0	0%	0	0
20	0	0	0	0	0%	0	0
21	0	0	0	0	0%	0	0
22	0	0	0	0	0%	0	0
23	0	0	0	0	0%	0	0
24	0	0	0	0	0%	0	0
Total	**144**	**50**	**44**	**44**	**31%**	**30**	**23**

Source: Walker Parking Consultants, 2016

During the peak hour, approximately 31% of the available public parking supply was occupied. Please note that Walker only identified the existence public parking facilities on four blocks in the Study Area. Additionally, the occupancy rate at these facilities varied greatly, with the facility on Block 4 experiencing a 73% occupancy rate while the lots on Blocks 2 and 15 were only 10% and 15% occupied, respectively.

At 2:00 p.m., approximately 45% of the private off-street parking supply was occupied. The parking occupancy on more than half of the blocks was observed at less than 50%, although there were a handful of blocks where demand was greater. As stated earlier, the observed parking demand on the survey day did not indicate a parking shortage.

Table 6: Weekday Parking Occupancy Summary - Private Off-Street

Block	Supply	10:00 AM	12:00 PM	2:00 PM	Percentage	5:30 PM	7:00 PM
1	247	140	93	92	37%	26	61
2	84	25	16	26	31%	2	1
3	38	13	11	15	39%	5	4
4	70	41	40	45	64%	21	38
5	94	49	42	46	49%	34	30
6	0	0	0	0	0%	0	0
7	252	54	39	48	19%	27	89
8	217	82	96	75	35%	87	107
9	63	52	45	63	100%	53	61
10	328	168	104	152	46%	17	3
11	40	20	16	20	50%	9	9
13	118	43	44	48	41%	17	15
14	72	13	51	44	61%	27	30
15	166	96	100	86	52%	36	50
16	256	111	125	128	50%	75	71
17	253	123	107	141	56%	42	23
18	35	9	11	14	40%	6	6
19	11	3	6	7	64%	0	0
20	97	21	23	30	31%	15	3
21	81	9	9	62	77%	36	14
22	81	49	50	58	72%	11	3
23	23	3	6	5	22%	8	15
24	101	20	26	20	20%	6	0
Total	**2,727**	**1,144**	**1,060**	**1,225**	**45%**	**560**	**633**

Source: Walker Parking Consultants, 2016

PARKING OCCUPANCY - WEEKEND

Using the same methodology as stated in the weekday section, Walker collected weekend parking space occupancy counts on Saturday, January 9, 2016. Five counts were taken at 10:00 a.m., 12:00 p.m., 3:00 p.m., 6:00 p.m., and 8:00 p.m.

The following table and figure summarize the observed occupancy rates for on-street and off-street parking.

Table 7: Weekend Parking Occupancy Summary

Type	Supply	10:00	%	12:00	%	3:00	%	6:00	%	8:00	%
On-Street	743	179	24%	230	31%	197	27%	197	27%	228	31%
Off-Street Public	144	46	32%	62	43%	10	7%	22	15%	20	14%
Off-Street Private	2,727	529	19%	675	25%	612	22%	798	29%	660	24%
Total	**3,614**	**754**	**21%**	**967**	**27%**	**819**	**23%**	**1,017**	**28%**	**908**	**25%**

Source: Walker Parking Consultants, 2016

The occupancy rates as a whole do not indicate a shortage of parking. Peak parking demand was observed around 6:00 p.m. with approximately 1,017 occupied spaces, or 28% of the overall supply. Private off-street spaces were occupied at a slightly higher percentage than the other land uses.

Figure 6: Weekend Parking Occupancy Summary

Source: Walker Parking Consultants, 2016

The next three figures show the parking occupancy by block for the observed peak hour of 6 p.m.

Figure 7: Weekend Parking Occupancy – Private Off-Street

Source: Walker Parking Consultants, 2016

Figure 8: Weekend Parking Occupancy – Public Off-Street and On-Street

Source: Walker Parking Consultants, 2016

The tables below illustrate the observed weekend occupancy for on-street, public off-street and private off-street parking by block.

Table 8: Weekend Parking Occupancy Summary – On-Street

Block	Supply	10:00 AM	12:00 PM	3:00 PM	6:00 PM	Percentage	8:00 PM
1	10	0	1	0	14	140%	0
2	25	1	0	0	0	0%	0
3	25	8	11	12	13	52%	17
4	28	8	9	11	11	39%	15
5	39	2	3	2	2	5%	3
6	16	1	1	1	1	6%	2
7	37	1	1	2	4	11%	8
8	56	19	23	26	35	63%	43
9	47	21	34	36	38	81%	47
10	46	1	2	0	0	0%	0
11	11	2	0	0	2	18%	0
13	50	8	10	2	1	2%	0
14	31	14	22	20	15	48%	26
15	69	35	45	31	27	39%	26
16	65	28	28	30	19	29%	21
17	79	11	7	9	8	10%	11
18	20	0	2	2	0	0%	0
19	23	7	2	3	2	9%	3
20	16	1	11	4	0	0%	0
21	18	0	0	0	0	0%	0
22	13	6	14	3	1	8%	1
23	4	3	1	2	3	75%	3
24	15	2	3	1	1	7%	2
Total	**743**	**179**	**230**	**197**	**197**	**27%**	**228**

Source: Walker Parking Consultants, 2016

Generally, on-street parking occupancy during the observed 6 p.m. peak hour ranged from 0% to 140%. As seen in the table above, the on-street occupancy during the weekend Survey Day rarely exceed 50% at any time on any block during our survey. We believe there were multiple events occurring on Block 1 that could account for the 140% occupancy rate.

Table 9: Weekend Parking Occupancy Summary – Public Off-Street

Block	Supply	10:00 AM	12:00 PM	3:00 PM	6:00 PM	Percentage	8:00 PM
1	0	0	0	0	0	0%	0
2	42	0	0	0	0	0%	0
3	0	0	0	0	0	0%	0
4	22	6	5	1	6	27%	4
5	0	0	0	0	0	0%	0
6	0	0	0	0	0	0%	0
7	0	0	0	0	0	0%	0
8	0	0	0	0	0	0%	0
9	0	0	0	0	0	0%	0
10	0	0	0	0	0	0%	0
11	0	0	0	0	0	0%	0
13	0	0	0	0	0	0%	0
14	0	0	0	0	0	0%	0
15	13	9	9	3	3	23%	3
16	67	31	48	6	13	19%	13
17	0	0	0	0	0	0%	0
18	0	0	0	0	0	0%	0
19	0	0	0	0	0	0%	0
20	0	0	0	0	0	0%	0
21	0	0	0	0	0	0%	0
22	0	0	0	0	0	0%	0
23	0	0	0	0	0	0%	0
24	0	0	0	0	0	0%	0
Total	**144**	**46**	**62**	**10**	**22**	**15%**	**20**

Source: Walker Parking Consultants, 2016

During the peak hour, approximately 15% of the available public off-street parking supply was occupied. While the overall weekend peak occurs around 6:00 p.m., the public parking was most utilized during the morning hours.

At 6:00 p.m., approximately 29% of the private off-street parking supply was occupied. The parking occupancy on most of the blocks was observed at less than 50%; however there were a few blocks where parking occupancy was at or near capacity, including Blocks 1, 9, and 15. Walker typically expects parking spaces to become more difficult to find and the parking facility to "appear" full when occupancy rates reach 85% or greater. At the observed parking levels, no shortages are expected.

Table 10: Weekend Parking Occupancy Summary - Private Off-Street

Block	Supply	10:00 AM	12:00 PM	3:00 PM	6:00 PM	Percentage	8:00 PM
1	247	79	103	108	211	85%	24
2	84	4	4	4	4	5%	0
3	38	6	8	4	12	32%	5
4	70	12	12	14	34	49%	50
5	94	9	17	19	33	35%	31
6	0	0	0	0	0	0%	0
7	252	8	3	3	38	15%	45
8	217	48	67	87	122	56%	129
9	63	11	19	30	60	95%	63
10	328	11	11	9	8	2%	6
11	40	19	22	14	5	13%	5
13	118	25	20	31	17	14%	6
14	72	16	35	37	50	69%	65
15	166	50	66	47	58	35%	60
16	256	98	148	72	58	23%	93
17	253	74	81	49	46	18%	33
18	35	11	8	14	3	9%	3
19	11	0	0	0	0	0%	0
20	97	2	2	2	2	2%	2
21	81	2	3	14	8	10%	4
22	81	4	5	13	5	6%	5
23	23	5	3	6	13	57%	25
24	101	35	38	35	11	11%	6
Total	**2,727**	**529**	**675**	**612**	**798**	**29%**	**660**

Note: Saints Peter and Paul Church is located on Block 1. It is believed a wedding and other school-related events may account for the 85% occupancy rate observed on Saturday night.

Source: Walker Parking Consultants, 2016

It is important to note that the downtown area hosts an antique show and a farmers market during our weekend survey. These events occurred on Block 15 and between Blocks 20 and 22. The spike in parking occupancy on Block 16 during the noon survey is attributed to these events. Additionally, the available parking supply on Block 15 is decreased from 9 am to 1 pm during the farmers market.

DESIGN DAY CONDITIONS

Because parking levels vary from day to day, the Survey Day does not always represent the peak level of activity and may need to be adjusted accordingly. Walker frequently recommends designing the parking supply to satisfy at least the 85th percentile level of activity. This level is usually equivalent to a very busy day that may occur once or twice a month. Designing parking to meet the absolute peak level of parking would leave many unused spaces during the majority of the year. Conversely, designing for the average level would mean inadequate parking about half the year.

Typically, we would compare historic occupancy data at public facilities to our Survey Day data in order to determine a Design Day level of Demand. For this project, historic data is unavailable. Instead, Walker calibrated a shared parking model based on observed peak occupancy using square footages of existing land uses by block (as provided by the City) and hourly and monthly presence factors published by the Urban Land Institute in *Shared Parking, 2nd Edition*. It is important to note that in a central business district such as downtown New Braunfels, the parking demand generated by the land uses on one block may not be 100% supported by the parking supply on that block; rather, parkers may utilize capacity on multiple surrounding blocks. As such, Walker's projections are in line with observations for the Study Area but may vary on a block-by-block basis.

For this engagement, to adjust for increased parking demand levels during summer months, Walker increased the observed weekday parking demand by 14.8% and the observed weekend parking demand by 22.6%. During peak weekday design conditions, we anticipate 1,722 occupied spaces or 47% of the available supply. The projected weekend design day demand is 1,245 spaces or 34% of supply.

PARKING ADEQUACY - WEEKDAY

Parking adequacy is the ability of the parking supply to accommodate the parking demand. The design day occupancy was subtracted from the effective supply to determine the adequacy for the Study Area. The parking adequacy for the Study Area is summarized in the following table.

Table 11: Weekday Parking Adequacy Summary

Block	Effective Supply	Total Design Demand	Total Surplus/ Deficit
1	243	112	131
2	139	38	101
3	57	26	31
4	110	88	22
5	122	68	54
6	14	1	13
7	271	60	211
8	254	102	152
9	100	113	(13)
10	351	204	147
11	47	23	24
13	155	64	91
14	95	66	29
15	228	122	106
16	359	194	165
17	308	178	130
18	50	17	33
19	30	14	16
20	106	36	70
21	92	74	18
22	88	76	12
23	25	8	17
24	109	38	71
Total	**3,352**	**1,722**	**1,630**

Source: Walker Parking Consultants, 2016

As a whole, the current parking system has a parking surplus during design weekday conditions, with all but one block showing a parking surplus.

Walker also analyzed the adequacy of the parking system by parking type. Based on Design Day conditions, there is a surplus of both on- and off-street parking spaces within the Study Area.

Table 12: Weekday Parking Adequacy Summary – by Type

Block	Off-Street Private Effective Supply	Design Demand	Surplus/ Deficit	Off-Street Public Effective Supply	Design Demand	Surplus/ Deficit	On-Street Effective Supply	Design Demand	Surplus/ Deficit
1	235	106	129	0	0	0	9	6	3
2	80	30	50	38	5	33	21	3	18
3	36	17	19	0	0	0	21	9	12
4	67	52	15	20	18	2	24	18	6
5	89	53	36	0	0	0	33	15	18
6	0	0	0	0	0	0	14	1	13
7	239	55	184	0	0	0	31	5	26
8	206	86	120	0	0	0	48	16	32
9	60	72	(12)	0	0	0	40	41	(1)
10	312	175	137	0	0	0	39	29	10
11	38	23	15	0	0	0	9	0	9
13	112	55	57	0	0	0	43	9	34
14	68	51	17	0	0	0	26	15	11
15	158	99	59	12	2	10	59	21	38
16	243	147	96	60	25	35	55	22	33
17	240	162	78	0	0	0	67	16	51
18	33	16	17	0	0	0	17	1	16
19	10	8	2	0	0	0	20	6	14
20	92	34	58	0	0	0	14	2	12
21	77	71	6	0	0	0	15	3	12
22	77	67	10	0	0	0	11	9	2
23	22	6	16	0	0	0	3	2	1
24	96	23	73	0	0	0	13	15	(2)
Total	**2,591**	**1,408**	**1,183**	**130**	**50**	**80**	**632**	**264**	**368**

Source: Walker Parking Consultants, 2016

Generally, there is adequate parking on all blocks for all three types of parking. There are small shortages anticipated on Blocks 9 and 24, but adequate parking in the surrounding area to support overflow.

PARKING ADEQUACY - WEEKEND

Demand was estimated based on the observed weekend parking occupancy counts recorded on January 9, 2016 and adjusted to account for Design Day conditions. The Design Day occupancy was subtracted from the effective supply to determine the adequacy for the Study Area. The parking adequacy for the Study Area by block and type is summarized in the following tables.

Table 13: Weekend Parking Adequacy Summary

Block	Effective Supply	Total Design Demand	Total Surplus/ Deficit
1	243	276	(33)
2	139	5	134
3	57	31	26
4	110	62	48
5	122	42	80
6	14	1	13
7	271	52	219
8	254	193	61
9	100	121	(21)
10	351	10	341
11	47	8	39
13	155	22	133
14	95	79	16
15	228	108	120
16	359	110	249
17	308	66	242
18	50	4	46
19	30	2	28
20	106	2	104
21	92	10	82
22	88	7	81
23	25	20	5
24	109	14	95
Total	**3,352**	**1,245**	**2,107**

Source: Walker Parking Consultants, 2016

As a whole, the current parking system has a parking surplus during weekend conditions. A 2,107-space surplus is expected during peak weekend conditions. Blocks 1 and 9 are expected to experience parking shortages. We understand that the church and school on Block 1 may have been hosting simultaneous events, accounting for the high demand on that block on a Saturday night.

Similar to weekday conditions, there is generally a surplus of parking on each block in each category during weekend conditions. However, on Blocks 1, 9, and 23 there are small parking shortages in both on-street and the private off-street parking supplies.

Table 14: Weekend Parking Adequacy Summary – by Type

Block	Off-Street Private Effective Supply	Design Demand	Surplus/ Deficit	Off-Street Public Effective Supply	Design Demand	Surplus/ Deficit	On-Street Effective Supply	Design Demand	Surplus/ Deficit
1	235	259	(24)	0	0	0	9	17	(9)
2	80	5	75	38	0	38	21	0	21
3	36	15	21	0	0	0	21	16	5
4	67	42	25	20	7	13	24	13	11
5	89	40	49	0	0	0	33	2	31
6	0	0	0	0	0	0	14	1	13
7	239	47	192	0	0	0	31	5	26
8	206	150	56	0	0	0	48	43	5
9	60	74	(14)	0	0	0	40	47	(7)
10	312	10	302	0	0	0	39	0	39
11	38	6	32	0	0	0	9	2	7
13	112	21	91	0	0	0	43	1	42
14	68	61	7	0	0	0	26	18	8
15	158	71	87	12	4	8	59	33	26
16	243	71	172	60	16	44	55	23	32
17	240	56	184	0	0	0	67	10	57
18	33	4	29	0	0	0	17	0	17
19	10	0	10	0	0	0	20	2	18
20	92	2	90	0	0	0	14	0	14
21	77	10	67	0	0	0	15	0	15
22	77	6	71	0	0	0	11	1	10
23	22	16	6	0	0	0	3	4	(1)
24	96	13	83	0	0	0	13	1	12
Total	**2,591**	**979**	**713**	**130**	**27**	**51**	**632**	**239**	**143**

Source: Walker Parking Consultants, 2016

LICENSE PLATE INVENTORY

Walker conducted a site survey and analysis of the on-street parking conditions within the downtown area of the City of New Braunfels. The survey portion of the inventory required that visual inspections of all restricted spaces (two hour limit) be made every hour, during which time the last three characters of the license plate on the occupying vehicle (if present) were recorded on a data collection form. The survey began at 9:00 a.m. and continued throughout the day until 4:00 p.m.

Analysis of the data required input of the collected license plate characters into a spreadsheet that examined the turnover characteristics on a block face at a time. (A block face is one side of a four-sided block that features restricted parking; not every block face in the downtown area is restricted by meters or a posted time limit.

The table below identifies the six block faces that were surveyed for this effort, which included Spring Street from Market to Court Streets.

Figure 9: LPI Map

New Braunfels TX LPI Map

(1) Block Numbers — LPI Route

Study Area

N

Source: Walker Parking Consultants, 2016

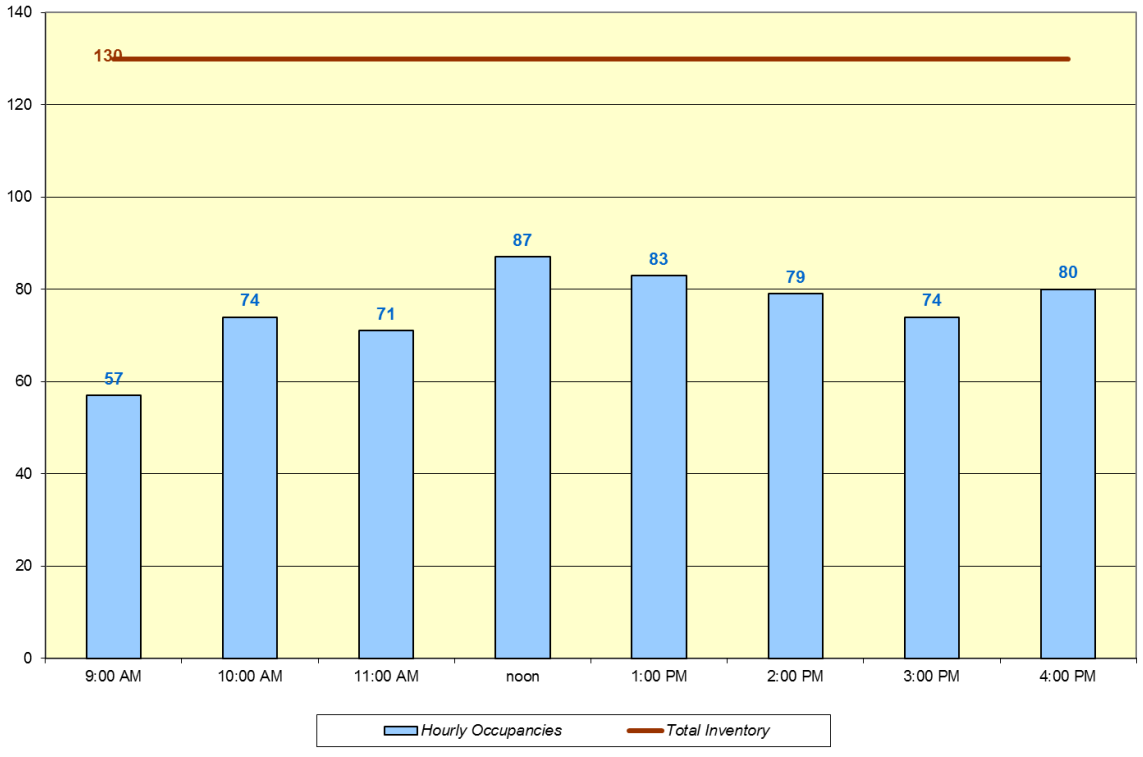
Table 15 shows that the peak parking occupancy occurred during the noon hour, with 87 out of 130 spaces being occupied, and representing a 67% occupancy rate.

Table 15: LPI Occupancy Summary

					Hourly Occupancies								Peak Hour
Street:	Side:	From:	To:	Total Inventory	9:00 AM	10:00 AM	11:00 AM	noon	1:00 PM	2:00 PM	3:00 PM	4:00 PM	noon
San Antonio	E	Square	Seguin	11	10	10	10	9	11	10	10	7	9
San Antonio	W	Sequin	Castell	23	14	19	17	17	18	17	17	16	17
Castell	N	San Antoni	Mill	13	2	4	4	9	8	4	7	10	9
Castell	S	Mill	San Antonio	9	6	5	7	8	8	7	6	9	8
San Antonio	W	Castell	Academy	23	3	8	8	15	13	11	8	7	15
San Antonio	E	Academy	Hill	3	0	1	0	0	3	1	1	0	0
San Antonio	E	Hill	Castell	16	6	10	13	14	9	12	9	12	14
San Antonio	E	Castell	Seguin	20	14	15	10	10	11	12	13	16	10
San Antonio	E	Sequin	Square	12	2	2	2	5	2	5	3	3	5
Total Occupancies				130	57	74	71	87	83	79	74	80	87
% Occupied					44%	57%	55%	67%	64%	61%	57%	62%	67%

Source: Walker Parking Consultants, 2016

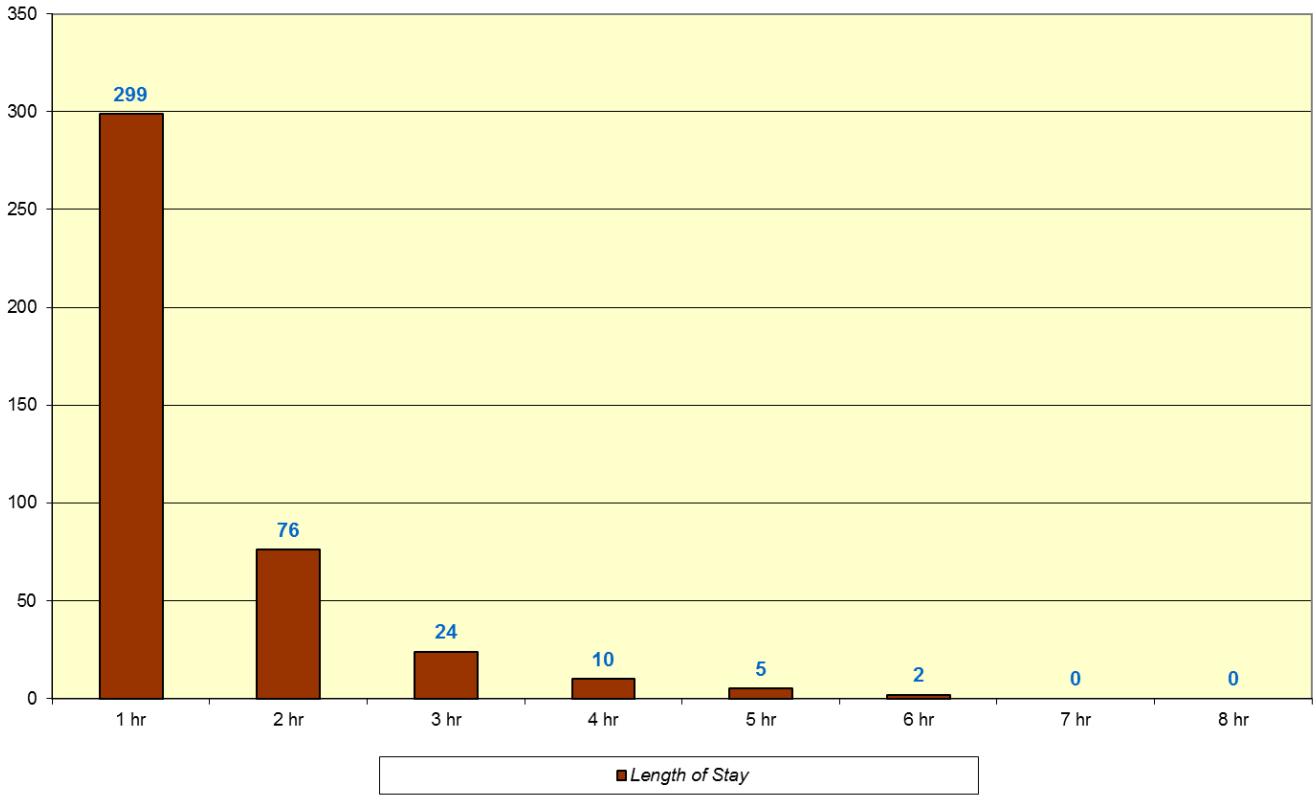
Figure 10: LPI Hourly Occupancy



Source: Walker Parking Consultants, 2016

Figure 6 below shows that most vehicles that were observed as parked on-street, were parked for one hour or less in the downtown area. This suggests that the majority of on-street spaces are used by short-term parkers, which is appropriate. This is not to say that specific streets within the study did not experience poor turnover. The high turnover at the majority of on-street spaces suggests that the public is, for the most part, obeying the posted time limits.

Figure 11: Length of Stay Summary



Source: Walker Parking Consultants, 2016

FUTURE CONDITIONS

FUTURE CONDITIONS

There are basically two different methods for projecting future parking volumes. One method involves the use of historical and projected growth rates. The other method involves the collection of information regarding the proposed development that is likely to occur in terms of land use and square footage changes. This information regarding future developments allows the projecting of vehicular volumes and parking demands for these new uses. However, as the planning horizon goes further and further into the future, the ability to predict these changes becomes more and more difficult and less accurate. In the case of New Braunfels, we will utilize a blended methodology.

PROJECTED PARKING DEMAND

Parking demand refers to the amount of parking that is estimated to be used at a particular time, place, and price. It is affected by vehicle ownership, trip rates, mode split, length of stay, geographic location, type of trip (work, shopping, special event), the quality of public transportation and factors such as fuel and parking costs. The methodology employed by Walker to project future demand combines the baseline demand which is equal to the observed weekday occupancy level, and any incremental change or growth in demand resulting from new land uses entering the Study Area. The baseline and incremental increase in demand are added together and then compared to the effective parking supply to determine the overall parking adequacy.

There are several proposed urban renewal and new downtown development projects that may directly impact parking in downtown New Braunfels. Walker used land use data provided by the City to project future parking demand for the Study Area. Walker focused on two planning horizons – 2021 and 2026. We assumed that all three of the known redevelopment projects would be occupied and fully operational by 2021. The vacant building on Block 15 is assumed to be occupied, but not fully operational until after the five-year planning horizon.

The list of proposed developments may not represent all real estate projects or business expansions being considered in the Study Area, but does represent a collection of the most significant and known projects being considered at this time. For the purpose of this study, the following projects are reflected in the calculation of future parking demand. The projects are organized by block.

Table 16: New Development Assumptions

Block	Development	Land Use	Size[1]	Unit
15	208 S Castell	Fine/Casual Restaurant	7,400	Square Feet
		Office	2,000	Square Feet
15	148 S Castell	Fine/Casual Restaurant	10,200	Square Feet
15	290 S Castell	Office	13,213	Square Feet
8	386 San Antonio	Entertainment	3,840	Square Feet
		Fine/Casual Restaurant	13,500	Square Feet

Source: City of New Braunfels, 2016

The figures below highlight a few of the properties identified for redevelopment.

Figure 12: Redevelopment Properties

Source: City of New Braunfels, 2016

There are two primary variables applied to the calculation of peak accumulation for new developments: 1) the total gross floor area (GFA), number of hotel rooms, seating capacity, etc. for each type of proposed land use (i.e. office, retail, restaurant, etc.), and 2) the appropriate parking demand ratio. The following section provides a discussion on the use of shared parking methodology when calculating the appropriate demand ratio to use for each type of land use in this analysis.

SHARED PARKING DEMAND

Shared parking is defined as parking spaces that can be used to serve two or more individual land uses without conflict or encroachment. One of the fundamental principles of downtown

planning from the earliest days of the automobile has always been to share parking resources rather than to have each use or building have its own parking. The resurgence of many central cities resulting from the addition of vibrant residential, retail, restaurant and entertainment developments continues to rely heavily on shared parking for economic viability. In addition, mixed-use projects in many different settings have benefited from shared parking. There are numerous benefits of shared parking to a community at large, not the least of which is the environmental benefit of significantly reducing the square feet of parking provided to serve commercial development.

The interplay of land uses in a mixed-use environment produces a reduction in overall parking demand. For example, a substantial percentage of patrons at one business (restaurant) may be employees of another downtown business (office). This is referred to as the "effects of the captive market". These patrons are already parking and contribute only once to the number of peak hour parkers. In other words, the parking demand ratio for individual land uses should be factored downward in proportion to the captive market support received from neighboring land uses.

Adjustments are also made to account for the number of patrons who arrive at the subject property by means other than personal vehicle. Based on data collected by the U.S. Census Bureau, Walker applied a drive ratio, or modal split factor, to each land use. Per current census data, approximately 90%[1] of employees arrive via personal vehicle in New Braunfels, Texas, depending on proximity to public transit and their type of occupation. The remaining 10% utilize another means of transportation such as mass transit, bicycle, or walking.

The base parking demand ratio for each land use is adjusted to represent the project ratio. Project ratios are calculated by multiplying the base ratio by the drive ratio (modal split), non-captive ratio (one minus the percent captive) and an hourly adjustment.

Table 17: Shared Parking Ratios - Weekday

Land Use	Base Demand Ratio[1]	Time of Day Adj[2]	Drive Ratio[3]	Captive Ratio Adj[4]	Adjusted 2026 Ratio
Office	3.80	100%	90%	100%	3.42
Entertainment	4.95	65%	90%	95%	2.75
Fine/Casual Restaurant	18.00	65%	90%	95%	10.00

Note: [1]ULI recommended base parking ratios
[2]Walker assumed peak demand occurred around 2:00 p.m.
[3]The US Census data indicated a 90% drive ratio for employees in New Braunfels, TX.
[4]Captive ratio adjustment accounts for long terms parkers from one land use visiting a second land use during the same visit without re-parking their vehicle. i.e. office employees visiting a restaurant for lunch.

Source: Walker Parking Consultants, 2016

Please note, the project ratios Walker utilized for office, entertainment, and fine/casual dining land uses are higher than those demand ratios observed for similar land uses in the downtown

[1] Walker used the 2008-2012 ACS survey to determine modal split.

area. Because there was both significant variation in the observed generation rates for the various land uses in the downtown area and a potential wide variation in demand due to seasonality, Walker based the future projections on ULI recommendations. If the proposed developments generate parking demand at a level similar to our observations, our five- and ten-year projections will need to be adjusted and scaled back accordingly. As stated earlier, we recommend spot checking parking demand in the downtown area during the peak season before making final plans for any infrastructure changes.

Both the base demand ratio and time of day adjustment factors change for the various land uses projected, sometimes significantly affecting the project ratio. For example, during the weekday, the base demand ratio for the fine/casual dining land use is 18 spaces per 1,000 sf. However, during weekend conditions, the base demand ratio increases to 20 spaces per 1,000 square foot. Additionally, during the 2:00 p.m. hour on a weekday, demand is only 65% of peak, but on the weekend at 6:00 p.m., demand is 90% of peak.

Table 18: Shared Parking Ratios – Weekend

Land Use	Base Demand Ratio[1]	Time of Day Adj[2]	Drive Ratio[3]	Captive Ratio Adj[4]	Adjusted 2026 Ratio
Office	0.38	5%	90%	100%	0.02
Entertainment	5.5	95%	90%	95%	4.47
Fine/Casual Restaurant	20	90%	90%	95%	15.39

Note: [1]ULI recommended base parking ratios
[2]Walker assumed peak demand occurred around 2:00 p.m.
[3]The US Census data indicated a 90% drive ratio for employees in New Braunfels, TX.
[4]Captive ratio adjustment accounts for long terms parkers from one land use visiting a second land use during the same visit without re-parking their vehicle. i.e. office employees visiting a restaurant for lunch.

Source: Walker Parking Consultants, 2016

FUTURE PARKING SUPPLY

At this time, no changes to the available parking supply in the downtown area are anticipated with respect to the proposed redevelopment properties. Discussions with the City indicate the County is considering a project on Block 2, which would eliminate the public parking supply on that block. However, no definitive plans are in place and therefore, Walker has assumed this lot will remain available to the general public throughout the ten-year planning horizon.

In a later section, Walker will comment on the potential to increase the existing parking supply through restriping and/or structured parking solutions.

FUTURE WEEKDAY CONDITIONS

2021 WEEKDAY CONDITIONS

Walker projected parking demand within the downtown Study Area for the 2021 planning horizon. The 2021 projections assume all three proposed redevelopment projects, as well as the currently vacant property on Block 15, are open and fully operational. Additionally, we assumed the remaining parking demand in the Study Area would grow at 3% compounded annually.

PARKING OCCUPANCY

Walker is projecting an overall parking space occupancy rate of 59% during weekday conditions by 2021, assuming no new parking is built with the redevelopment projects. When parking occupancies reach 85% or greater, finding available parking can be difficult. Most of the blocks within our Study Area are expected to experience parking rates below 85%.

Table 19: 2021 Parking Occupancy – Weekday

Block #	Supply	2016 Design Demand	2021 Total Demand	Percentage
1	257	112	113	44%
2	151	38	39	26%
3	63	26	27	44%
4	120	88	94	78%
5	133	68	70	53%
6	16	1	1	7%
7	289	60	61	21%
8	273	102	251	92%
9	110	113	120	109%
10	374	204	209	56%
11	51	23	23	45%
13	168	64	65	39%
14	103	66	68	66%
15	248	122	354	143%
16	388	194	201	52%
17	332	178	181	54%
18	55	17	17	31%
19	34	14	15	44%
20	113	36	36	32%
21	99	74	74	75%
22	94	76	77	82%
23	27	8	8	31%
24	116	38	40	35%
Totals	**3,614**	**1,722**	**2,146**	**59%**

Source: Walker Parking Consultants, 2016

The table on the following page summarizes the 2021 parking demand by block for each parking type.

On-street parking demand is expected to increase to 306 occupied spaces over the next five years. By 2021, a 41% occupancy rate is projected. Please note that while a few blocks are expected to experience parking rates near or above 85%, the majority of blocks are expected to have available parking supply.

When public off-street parking is considered, Walker anticipates a weekday public parking demand of 58 spaces, or a 40% occupancy rate. Public off-street occupancy rates are expected to vary from 14% to 95%, depending on which facility is considered.

Table 20: 2021 Parking Occupancy Weekday – by Type

	On-Street			Public Off-Street			Private Off-Street		
	2021			2021			2021		
Block #	Supply	Demand	Percentage	Supply	Demand	Percentage	Supply	Demand	Percentage
1	10	7	70%	0	0	0%	247	106	43%
2	25	3	14%	42	6	14%	84	30	36%
3	25	10	42%	0	0	0%	38	17	45%
4	28	21	75%	22	21	95%	70	52	74%
5	39	17	45%	0	0	0%	94	53	56%
6	16	1	7%	0	0	0%	0	0	0%
7	37	6	16%	0	0	0%	252	55	22%
8	56	19	33%	0	0	0%	217	232	107%
9	47	48	101%	0	0	0%	63	72	114%
10	46	34	73%	0	0	0%	328	175	53%
11	11	0	0%	0	0	0%	40	23	58%
13	50	10	21%	0	0	0%	118	55	47%
14	31	17	56%	0	0	0%	72	51	71%
15	69	24	35%	13	2	18%	166	327	197%
16	65	26	39%	67	29	43%	256	147	57%
17	79	19	23%	0	0	0%	253	162	64%
18	20	1	6%	0	0	0%	35	16	46%
19	23	7	30%	0	0	0%	11	8	73%
20	16	2	14%	0	0	0%	97	34	35%
21	18	3	19%	0	0	0%	81	71	88%
22	13	10	80%	0	0	0%	81	67	83%
23	4	2	58%	0	0	0%	23	6	26%
24	15	17	116%	0	0	0%	101	23	23%
Totals	**743**	**306**	**41%**	**144**	**58**	**40%**	**2,727**	**1,782**	**65%**

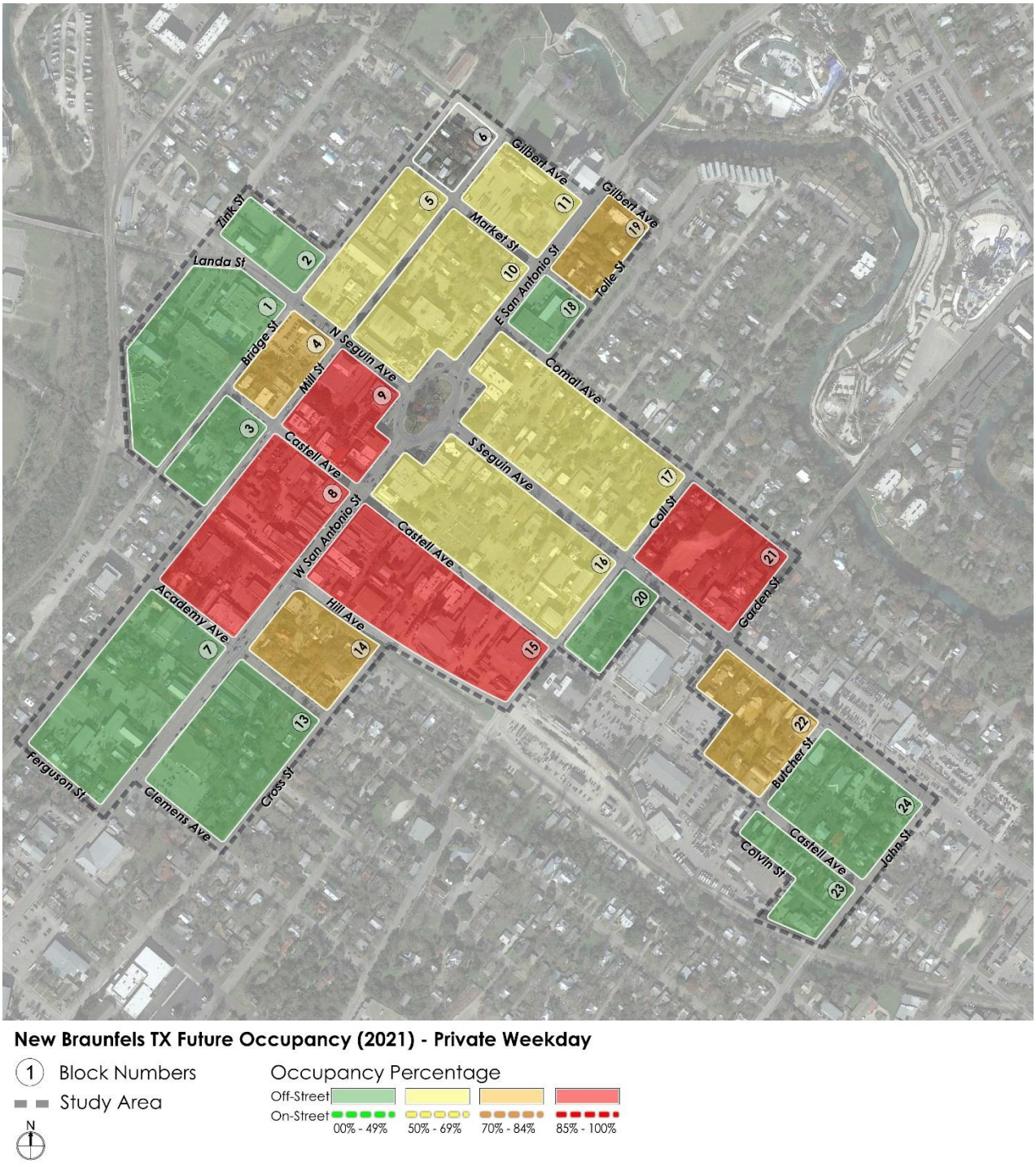
Source: Walker Parking Consultants, 2016

Walker did not apply a growth factor to the existing private parking demand; rather private demand was increased based on the projected demand associated with the known

redevelopments and vacancy. By 2021, a parking demand of 1,782 private off-street spaces is expected, resulting in a 65% occupancy rate.

The following figures illustrate the public and private parking occupancy by block.

Figure 13: 2021 Weekday Occupancy – Private Off-Street



Source: Walker Parking Consultants, 2016

Figure 14: 2021 Weekday Occupancy – Public Off-Street and On-Street

Source: Walker Parking Consultants, 2016

PARKING ADEQUACY

As discussed earlier, parking adequacy is the ability of the parking supply to accommodate the parking demand. In order to determine the 2021 adequacy, Walker compared the projected parking demand to the effective parking supply. As shown in Table 21, adequate parking is available within the Study Area on most blocks.

Table 21: 2021 Parking Adequacy - Weekday

Block #	Effective Supply	2016 Design Demand	2021 Total Demand	Surplus/ Deficit
1	243	112	113	130
2	139	38	39	100
3	57	26	27	30
4	110	88	94	16
5	122	68	70	52
6	14	1	1	12
7	271	60	61	210
8	254	102	251	3
9	100	113	120	(20)
10	351	204	209	142
11	47	23	23	24
13	155	64	65	89
14	95	66	68	26
15	228	122	354	(126)
16	359	194	201	157
17	308	178	181	127
18	50	17	17	33
19	30	14	15	15
20	106	36	36	69
21	92	74	74	18
22	88	76	77	11
23	25	8	8	17
24	109	38	40	68
Totals	**3,352**	**1,722**	**2,146**	**1,206**

Source: Walker Parking Consultants, 2016

In addition to projecting the overall adequacy for each block, Walker also considered the adequacy of each type of parking supply to support demand.

Table 22: 2021 Parking Adequacy Weekday – by Type

	On-Street			Public Off-Street			Private Off-Street		
Block #	Effective Supply	2021 Demand	Surplus/ Deficit	Effective Supply	2021 Demand	Surplus/ Deficit	Effective Supply	2021 Demand	Surplus/ Deficit
1	9	7	2	0	0	0	235	106	129
2	21	3	18	38	6	32	80	30	50
3	21	10	11	0	0	0	36	17	19
4	24	21	3	20	21	(1)	67	52	15
5	33	17	16	0	0	0	89	53	36
6	14	1	12	0	0	0	0	0	0
7	31	6	26	0	0	0	239	55	184
8	48	19	29	0	0	0	206	232	(26)
9	40	48	(8)	0	0	0	60	72	(12)
10	39	34	5	0	0	0	312	175	137
11	9	0	9	0	0	0	38	23	15
13	43	10	32	0	0	0	112	55	57
14	26	17	9	0	0	0	68	51	17
15	59	24	34	12	2	9	158	327	(169)
16	55	26	30	60	29	31	243	147	96
17	67	19	49	0	0	0	240	162	78
18	17	1	16	0	0	0	33	16	17
19	20	7	13	0	0	0	10	8	2
20	14	2	11	0	0	0	92	34	58
21	15	3	12	0	0	0	77	71	6
22	11	10	1	0	0	0	77	67	10
23	3	2	1	0	0	0	22	6	16
24	13	17	(5)	0	0	0	96	23	73
Totals	**632**	**306**	**326**	**130**	**58**	**72**	**2,591**	**1,782**	**809**

Source: Walker Parking Consultants, 2016

A parking surplus of approximately 800 spaces is expected for private parking within the Study Area. While the overall study area is anticipated to experience parking surpluses, Blocks 8, 9, and 15 are anticipated to experience parking shortages.

When the public off-street parking demand is projected, a surplus of 72 spaces is projected, while on-street parking is expected to experience a 326-space surplus.

2026 WEEKDAY CONDITIONS

PARKING OCCUPANCY

Walker is projecting an overall occupancy rate of 61% during weekday conditions by 2026. When parking occupancies reach 85% or greater, finding available parking can be difficult. Most of the blocks within our Study Area are expected to experience parking rates below 85%, with the exception of Blocks 4, 8, 9, 15, and 22. As stated earlier, no changes to the available parking supply are expected in the downtown area at this time.

Table 23: 2026 Parking Occupancy – Weekday

Block #	Supply	2016 Design Demand	2021 Total Demand	2026 Total Demand	Percentage
1	257	112	113	114	44%
2	151	38	39	41	27%
3	63	26	27	29	46%
4	120	88	94	100	84%
5	133	68	70	73	55%
6	16	1	1	1	8%
7	289	60	61	62	21%
8	273	102	251	254	93%
9	110	113	120	127	116%
10	374	204	209	214	57%
11	51	23	23	23	45%
13	168	64	65	67	40%
14	103	66	68	71	69%
15	248	122	354	358	144%
16	388	194	201	210	54%
17	332	178	181	184	55%
18	55	17	17	17	32%
19	34	14	15	16	47%
20	113	36	36	37	32%
21	99	74	74	75	76%
22	94	76	77	79	84%
23	27	8	8	9	32%
24	116	38	40	43	37%
Totals	**3,614**	**1,722**	**2,146**	**2,204**	**61%**

Source: Walker Parking Consultants, 2016

Table 24 summarizes the 2026 parking demand by block for each parking type.

Table 24: 2026 Weekday Parking Occupancy – by Type

	On-Street			Public Off-Street			Private Off-Street		
	2026			2026			2026		
Block #	Supply	Demand	Percentage	Supply	Demand	Percentage	Supply	Demand	Percentage
1	10	8	81%	0	0	0%	247	106	43%
2	25	4	16%	42	7	16%	84	30	36%
3	25	12	48%	0	0	0%	38	17	45%
4	28	24	86%	22	24	110%	70	52	74%
5	39	20	52%	0	0	0%	94	53	56%
6	16	1	8%	0	0	0%	0	0	0%
7	37	7	18%	0	0	0%	252	55	22%
8	56	22	38%	0	0	0%	217	232	107%
9	47	55	117%	0	0	0%	63	72	114%
10	46	39	85%	0	0	0%	328	175	53%
11	11	0	0%	0	0	0%	40	23	58%
13	50	12	24%	0	0	0%	118	55	47%
14	31	20	65%	0	0	0%	72	51	71%
15	69	28	41%	13	3	21%	166	327	197%
16	65	30	45%	67	34	50%	256	147	57%
17	79	22	27%	0	0	0%	253	162	64%
18	20	1	7%	0	0	0%	35	16	46%
19	23	8	35%	0	0	0%	11	8	73%
20	16	3	17%	0	0	0%	97	34	35%
21	18	4	22%	0	0	0%	81	71	88%
22	13	12	93%	0	0	0%	81	67	83%
23	4	3	67%	0	0	0%	23	6	26%
24	15	20	134%	0	0	0%	101	23	23%
Totals	**743**	**355**	**48%**	**144**	**67**	**47%**	**2,727**	**1,782**	**65%**

Source: Walker Parking Consultants, 2016

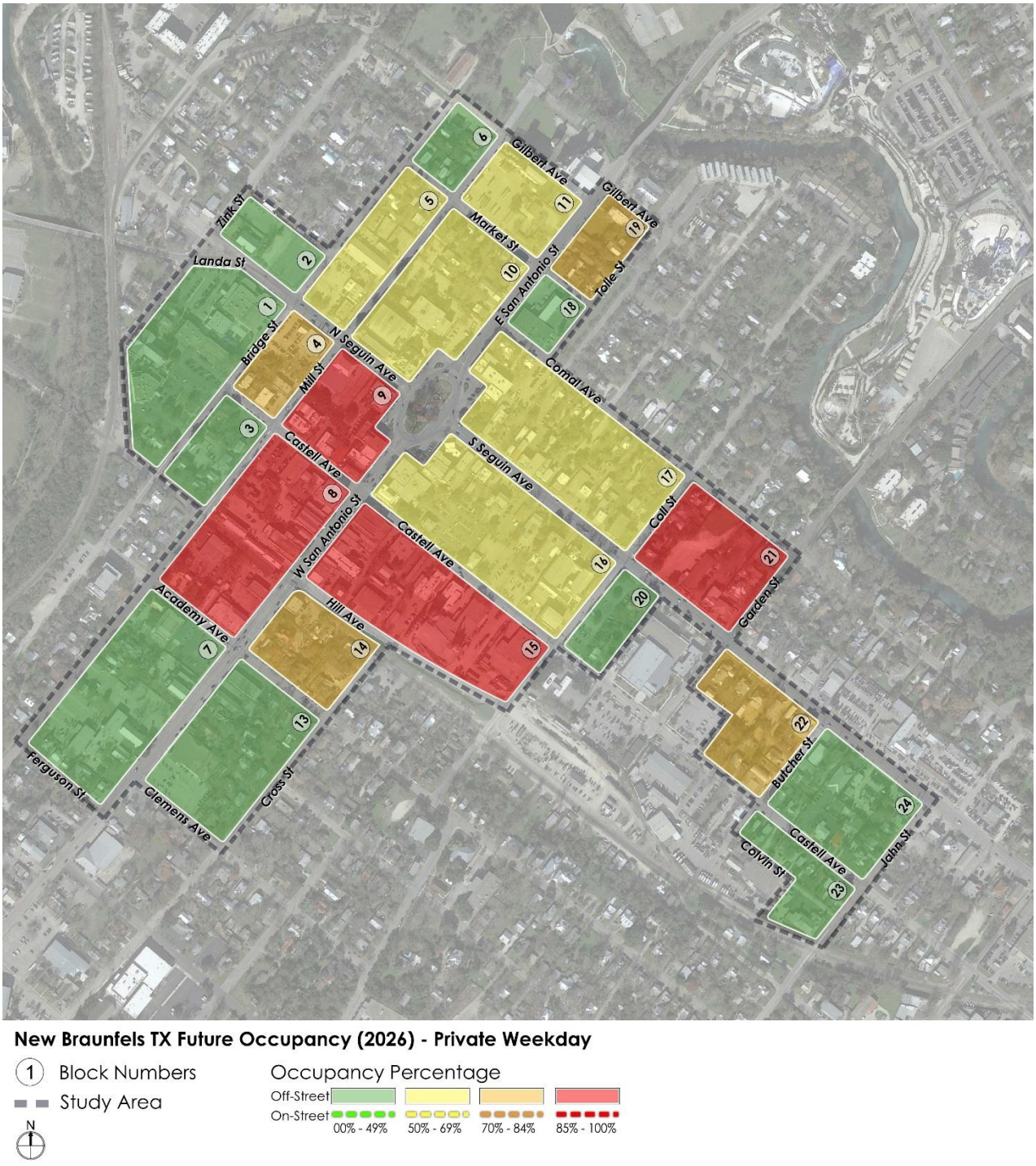
On-street parking demand is expected to increase to 355 occupied spaces over the next ten years. By 2026, a 48% occupancy rate is projected. Please note that only a few blocks are expected to experience parking rates near or above 85%, the majority of blocks are expected to have available parking supply.

Assuming the observed parking demand in the public lots continues to grow by 3% annually, Walker anticipates a weekday public parking demand of 67 spaces, or a 47% occupancy rate.

Lastly, Walker did not apply a growth factor to the existing private parking demand; rather private demand was increased based on the projected demand associated with the three known redevelopments and a vacant property. By 2026, a parking demand of 1,782 spaces is expected, resulting in a 65% occupancy rate.

The figures below illustrate the public and private parking occupancy by block.

Figure 15: 2026 Weekday Occupancy – Private Off-Street



Source: Walker Parking Consultants, 2016

Figure 16: 2026 Weekday Occupancy – Public Off-Street and On-Street

Source: Walker Parking Consultants, 2016

PARKING ADEQUACY

As discussed earlier, parking adequacy is the ability of the parking supply to accommodate the parking demand. Walker compared the projected parking demand to the future effective parking supply in order to determine the 2026 adequacy. As shown in the table below, adequate parking is available within the Study Area on most blocks.

Table 25: 2026 Parking Adequacy - Weekday

Block #	Effective Supply	2016 Design Demand	2021 Total Demand	2026 Total Demand	Surplus/ Deficit
1	243	112	113	114	129
2	139	38	39	41	98
3	57	26	27	29	28
4	110	88	94	100	10
5	122	68	70	73	49
6	14	1	1	1	12
7	271	60	61	62	209
8	254	102	251	254	0
9	100	113	120	127	(27)
10	351	204	209	214	137
11	47	23	23	23	24
13	155	64	65	67	88
14	95	66	68	71	24
15	228	122	354	358	(130)
16	359	194	201	210	149
17	308	178	181	184	124
18	50	17	17	17	33
19	30	14	15	16	14
20	106	36	36	37	69
21	92	74	74	75	17
22	88	76	77	79	9
23	25	8	8	9	17
24	109	38	40	43	66
Totals	**3,352**	**1,722**	**2,146**	**2,204**	**1,148**

Source: Walker Parking Consultants, 2016

In addition to projecting the overall adequacy for each block, Walker also considered the adequacy of each type of parking supply to support demand in the table below.

Table 26: 2026 Parking Adequacy Weekday – by Type

	On-Street			Public Off-Street			Private Off-Street		
Block #	Effective Supply	2026 Demand	Surplus/ Deficit	Effective Supply	2026 Demand	Surplus/ Deficit	Effective Supply	2026 Demand	Surplus/ Deficit
1	9	8	0	0	0	0	235	106	129
2	21	4	17	38	7	31	80	30	50
3	21	12	9	0	0	0	36	17	19
4	24	24	(0)	20	24	(4)	67	52	15
5	33	20	13	0	0	0	89	53	36
6	14	1	12	0	0	0	0	0	0
7	31	7	25	0	0	0	239	55	184
8	48	22	26	0	0	0	206	232	(26)
9	40	55	(15)	0	0	0	60	72	(12)
10	39	39	0	0	0	0	312	175	137
11	9	0	9	0	0	0	38	23	15
13	43	12	30	0	0	0	112	55	57
14	26	20	6	0	0	0	68	51	17
15	59	28	30	12	3	9	158	327	(169)
16	55	30	26	60	34	27	243	147	96
17	67	22	46	0	0	0	240	162	78
18	17	1	16	0	0	0	33	16	17
19	20	8	11	0	0	0	10	8	2
20	14	3	11	0	0	0	92	34	58
21	15	4	11	0	0	0	77	71	6
22	11	12	(1)	0	0	0	77	67	10
23	3	3	1	0	0	0	22	6	16
24	13	20	(7)	0	0	0	96	23	73
Totals	**632**	**355**	**277**	**130**	**67**	**62**	**2,591**	**1,782**	**809**

Source: Walker Parking Consultants, 2016

While parking surpluses are anticipated in all three parking categories, several blocks are expected to experience shortages in their on-street or private off-street supplies. These blocks include 4, 8, 9, and 15. The shortages are due primarily to the redevelopment projects on these blocks.

FUTURE WEEKEND CONDITIONS

2021 WEEKEND CONDITIONS

Walker also projected parking demand during peak weekend conditions for the City of New Braunfels based on our observations and the demand associated with the proposed projects. Similar to the weekday analysis, a 3% compound annual growth rate was applied to all public parking demand.

PARKING OCCUPANCY

Walker is projecting a weekend parking demand of 1,783 vehicles by 2021, which equates to a 538 space increase in five years. The majority of this increase can be contributed to the proposed developments on Blocks 8 and 15. When compared to the future parking supply, a 49% occupancy rate is projected.

Parking demand on most blocks does not exceed 55%, with the exception of Blocks 1, 8, 9, 14, 15 and 23.

Table 27: 2021 Parking Occupancy – Weekend

Block #	Supply	2016 Design Demand	2021 Total Demand	Percentage
1	257	276	279	108%
2	151	5	5	3%
3	63	31	34	53%
4	120	62	65	54%
5	133	42	42	32%
6	16	1	1	7%
7	289	52	53	18%
8	273	193	425	156%
9	110	121	128	117%
10	374	10	10	3%
11	51	8	8	16%
13	168	22	22	13%
14	103	79	82	79%
15	248	108	385	155%
16	388	110	116	30%
17	332	66	68	20%
18	55	4	4	7%
19	34	2	2	7%
20	113	2	2	2%
21	99	10	10	10%
22	94	7	7	8%
23	27	20	21	76%
24	116	14	14	12%
Totals	**3,614**	**1,245**	**1,783**	**49%**

Source: Walker Parking Consultants, 2016

The 2021 weekend parking demand by block for each parking type is summarized in Table 28 below.

Table 28: 2021 Parking Occupancy Weekend – by Type

	On-Street			Public Off-Street			Private Off-Street		
	2021			2021			2021		
Block #	Supply	Demand	Percentage	Supply	Demand	Percentage	Supply	Demand	Percentage
1	10	20	197%	0	0	0%	247	259	105%
2	25	0	0%	42	0	0%	84	5	6%
3	25	19	74%	0	0	0%	38	15	39%
4	28	15	54%	22	8	37%	70	42	60%
5	39	2	6%	0	0	0%	94	40	43%
6	16	1	7%	0	0	0%	0	0	0%
7	37	6	16%	0	0	0%	252	47	19%
8	56	50	89%	0	0	0%	217	375	173%
9	47	54	116%	0	0	0%	63	74	117%
10	46	0	0%	0	0	0%	328	10	3%
11	11	2	21%	0	0	0%	40	6	15%
13	50	1	2%	0	0	0%	118	21	18%
14	31	21	67%	0	0	0%	72	61	85%
15	69	38	55%	13	5	36%	166	342	206%
16	65	27	41%	67	19	28%	256	71	28%
17	79	12	15%	0	0	0%	253	56	22%
18	20	0	0%	0	0	0%	35	4	11%
19	23	2	10%	0	0	0%	11	0	0%
20	16	0	0%	0	0	0%	97	2	2%
21	18	0	0%	0	0	0%	81	10	12%
22	13	1	9%	0	0	0%	81	6	7%
23	4	5	116%	0	0	0%	23	16	70%
24	15	1	8%	0	0	0%	101	13	13%
Totals	**743**	**277**	**37%**	**144**	**31**	**22%**	**2,727**	**1,475**	**54%**

Source: Walker Parking Consultants, 2016

On-street parking demand is expected to increase to 277 occupied spaces by 2021 during weekend conditions. A 37% occupancy rate is projected. Additionally, with the exception of blocks 1, 9, and 23, all of the blocks are expected to have available parking supply.

Assuming the observed parking demand in the public lots is increased by a 3% annual compound rate for five years, Walker anticipates a 22% occupancy rate. A weekend parking demand of approximately 31 spaces is projected.

Walker did not apply a growth factor to the existing private parking demand; rather private demand was increased based on the projected demand associated with the three known developments. By 2021, a parking demand of 1,475 spaces is expected, resulting in a 54% occupancy rate.

The figures below illustrate the public and private parking occupancy by block.

Figure 17: 2021 Weekend Occupancy – Private Off-Street

Source: Walker Parking Consultants, 2016

Figure 18: 2021 Weekend Occupancy – Public Off-Street and On-Street

Source: Walker Parking Consultants, 2016

PARKING ADEQUACY

In order to determine the 2021 weekend adequacy, Walker compared the projected weekend parking demand to the effective parking supply. Adequate parking is available within the Study Area on most blocks, as shown in the table below. A surplus of approximately 1,568 spaces is anticipated.

Table 29: 2021 Parking Adequacy - Weekend

Block #	Effective Supply	2016 Design Demand	2021 Total Demand	Surplus/ Deficit
1	243	276	279	(36)
2	139	5	5	134
3	57	31	34	24
4	110	62	65	45
5	122	42	42	80
6	14	1	1	12
7	271	52	53	218
8	254	193	425	(171)
9	100	121	128	(29)
10	351	10	10	341
11	47	8	8	39
13	155	22	22	132
14	95	79	82	13
15	228	108	385	(157)
16	359	110	116	243
17	308	66	68	240
18	50	4	4	46
19	30	2	2	28
20	106	2	2	104
21	92	10	10	82
22	88	7	7	81
23	25	20	21	5
24	109	14	14	95
Totals	**3,352**	**1,245**	**1,783**	**1,568**

Source: Walker Parking Consultants, 2016

In addition to projecting the overall adequacy for each block, Walker also considered the adequacy of each type of parking supply to support demand. The table below summarizes our findings.

Table 30: 2021 Parking Adequacy Weekend – by Type

	On-Street			Public Off-Street			Private Off-Street		
Block #	Effective Supply	2021 Demand	Surplus/ Deficit	Effective Supply	2021 Demand	Surplus/ Deficit	Effective Supply	2021 Demand	Surplus/ Deficit
1	9	20	(11)	0	0	0	235	259	(24)
2	21	0	21	38	0	38	80	5	75
3	21	19	3	0	0	0	36	15	21
4	24	15	9	20	8	12	67	42	25
5	33	2	31	0	0	0	89	40	49
6	14	1	12	0	0	0	0	0	0
7	31	6	26	0	0	0	239	47	192
8	48	50	(2)	0	0	0	206	375	(169)
9	40	54	(15)	0	0	0	60	74	(14)
10	39	0	39	0	0	0	312	10	302
11	9	2	7	0	0	0	38	6	32
13	43	1	41	0	0	0	112	21	91
14	26	21	5	0	0	0	68	61	7
15	59	38	20	12	5	7	158	342	(184)
16	55	27	29	60	19	42	243	71	172
17	67	12	56	0	0	0	240	56	184
18	17	0	17	0	0	0	33	4	29
19	20	2	17	0	0	0	10	0	10
20	14	0	14	0	0	0	92	2	90
21	15	0	15	0	0	0	77	10	67
22	11	1	10	0	0	0	77	6	71
23	3	5	(1)	0	0	0	22	16	6
24	13	1	12	0	0	0	96	13	83
Totals	**632**	**277**	**354**	**130**	**31**	**98**	**2,591**	**1,475**	**1,116**

Source: Walker Parking Consultants, 2016

On-street parking is expected to experience a 354-space surplus by 2021, with only Blocks 1, 8, 9, and 23 experiencing deficits. When the public off-street parking demand is studied, a surplus of 98 spaces is projected.

A parking surplus of more than 1,100 spaces is expected for private parking within the Study Area by 2021. However, large deficits are projected on Blocks 8 and 15 in conjunction with the redevelopment projects on those blocks.

2026 WEEKEND CONDITIONS

PARKING OCCUPANCY

A weekend parking demand of 1,832 spaces is expected by 2026. When compared to the future parking supply, a 51% occupancy rate is projected.

When parking occupancies reach 85% or greater, finding available parking can be difficult. Most of the blocks within our Study Area are expected to experience parking rates below 85%. Parking demand on most blocks does not exceed 70%, with the exception of blocks 1, 8, 9, 14, 15, and 23.

Table 31: 2026 Parking Occupancy – Weekend

Block #	Supply	2016 Design Demand	2021 Total Demand	2026 Total Demand	Percentage
1	257	276	279	282	110%
2	151	5	5	5	3%
3	63	31	34	37	58%
4	120	62	65	69	57%
5	133	42	42	43	32%
6	16	1	1	1	8%
7	289	52	53	54	19%
8	273	193	425	433	159%
9	110	121	128	137	125%
10	374	10	10	10	3%
11	51	8	8	9	17%
13	168	22	22	22	13%
14	103	79	82	85	83%
15	248	108	385	392	158%
16	388	110	116	123	32%
17	332	66	68	69	21%
18	55	4	4	4	7%
19	34	2	2	3	8%
20	113	2	2	2	2%
21	99	10	10	10	10%
22	94	7	7	7	8%
23	27	20	21	21	79%
24	116	14	14	14	12%
Totals	**3,614**	**1,245**	**1,783**	**1,832**	**51%**

Source: Walker Parking Consultants, 2016

The table on the page below summarizes the 2026 weekend parking demand by block for each parking type.

Table 32: 2026 Parking Occupancy Weekend – by Type

	On-Street			Public Off-Street			Private Off-Street		
		2026			2026			2026	
Block #	Supply	Demand	Percentage	Supply	Demand	Percentage	Supply	Demand	Percentage
1	10	23	228%	0	0	0%	247	259	105%
2	25	0	0%	42	0	0%	84	5	6%
3	25	22	86%	0	0	0%	38	15	39%
4	28	17	62%	22	9	43%	70	42	60%
5	39	3	7%	0	0	0%	94	40	43%
6	16	1	8%	0	0	0%	0	0	0%
7	37	7	18%	0	0	0%	252	47	19%
8	56	58	103%	0	0	0%	217	375	173%
9	47	63	134%	0	0	0%	63	74	117%
10	46	0	0%	0	0	0%	328	10	3%
11	11	3	24%	0	0	0%	40	6	15%
13	50	1	3%	0	0	0%	118	21	18%
14	31	24	78%	0	0	0%	72	61	85%
15	69	44	64%	13	5	41%	166	342	206%
16	65	31	48%	67	22	32%	256	71	28%
17	79	13	17%	0	0	0%	253	56	22%
18	20	0	0%	0	0	0%	35	4	11%
19	23	3	12%	0	0	0%	11	0	0%
20	16	0	0%	0	0	0%	97	2	2%
21	18	0	0%	0	0	0%	81	10	12%
22	13	1	10%	0	0	0%	81	6	7%
23	4	5	134%	0	0	0%	23	16	70%
24	15	1	9%	0	0	0%	101	13	13%
Totals	**743**	**321**	**43%**	**144**	**36**	**25%**	**2,727**	**1,475**	**54%**

Source: Walker Parking Consultants, 2016

Assuming the observed parking demand on-street is increased by a 3% annual compound rate for ten years, Walker anticipates a 43% occupancy rate. A weekend parking demand of approximately 321 spaces is projected. The public off-street parking demand was also grown by 3% annual for ten years. A 25% occupancy rate is anticipated during weekend conditions.

Walker did not apply a growth factor to the existing private parking demand; rather private demand was increased based on the projected demand associated with the three known developments. As shown in the table above, a parking demand of 1,475 spaces is expected, resulting in a 54% occupancy rate by 2026.

The figures below illustrate the public and private parking occupancy by block.

Figure 19: 2026 Weekend Occupancy – Private Off-Street

Source: Walker Parking Consultants, 2016

Figure 20: 2026 Weekend Occupancy – Public Off-Street and On-Street

Source: Walker Parking Consultants, 2016

PARKING ADEQUACY

The 2026 weekend adequacy was determined by comparing the projected weekend parking demand to the future effective parking supply. Adequate parking is available within the Study Area on most blocks, as shown in the table below. A surplus of approximately 1,519 spaces is anticipated.

Table 33: 2026 Parking Adequacy - Weekend

Block #	Effective Supply	2016 Design Demand	2021 Total Demand	2026 Total Demand	Surplus/ Deficit
1	243	276	279	282	(39)
2	139	5	5	5	134
3	57	31	34	37	21
4	110	62	65	69	41
5	122	42	42	43	80
6	14	1	1	1	12
7	271	52	53	54	217
8	254	193	425	433	(179)
9	100	121	128	137	(37)
10	351	10	10	10	341
11	47	8	8	9	39
13	155	22	22	22	132
14	95	79	82	85	10
15	228	108	385	392	(164)
16	359	110	116	123	235
17	308	66	68	69	238
18	50	4	4	4	46
19	30	2	2	3	27
20	106	2	2	2	104
21	92	10	10	10	82
22	88	7	7	7	81
23	25	20	21	21	4
24	109	14	14	14	94
Totals	**3,352**	**1,245**	**1,783**	**1,832**	**1,519**

Source: Walker Parking Consultants, 2016

In addition to projecting the overall adequacy for each block, Walker also considered the adequacy of each type of parking supply to support demand.

As shown in the table below, a parking surplus of more than 1,100 spaces is expected for private parking within the Study Area over the next ten years. Parking shortages are projected for Blocks 1, 8, 9, and 15. These shortages are associated with the redevelopment projects on these blocks.

Table 34: 2026 Parking Adequacy Weekend – by Type

	On-Street			Public Off-Street			Private Off-Street		
Block #	Effective Supply	2026 Demand	Surplus/ Deficit	Effective Supply	2026 Demand	Surplus/ Deficit	Effective Supply	2026 Demand	Surplus/ Deficit
1	9	23	(14)	0	0	0	235	259	(24)
2	21	0	21	38	0	38	80	5	75
3	21	22	(0)	0	0	0	36	15	21
4	24	17	6	20	9	10	67	42	25
5	33	3	30	0	0	0	89	40	49
6	14	1	12	0	0	0	0	0	0
7	31	7	25	0	0	0	239	47	192
8	48	58	(10)	0	0	0	206	375	(169)
9	40	63	(23)	0	0	0	60	74	(14)
10	39	0	39	0	0	0	312	10	302
11	9	3	7	0	0	0	38	6	32
13	43	1	41	0	0	0	112	21	91
14	26	24	2	0	0	0	68	61	7
15	59	44	14	12	5	6	158	342	(184)
16	55	31	24	60	22	39	243	71	172
17	67	13	54	0	0	0	240	56	184
18	17	0	17	0	0	0	33	4	29
19	20	3	17	0	0	0	10	0	10
20	14	0	14	0	0	0	92	2	90
21	15	0	15	0	0	0	77	10	67
22	11	1	10	0	0	0	77	6	71
23	3	5	(2)	0	0	0	22	16	6
24	13	1	11	0	0	0	96	13	83
Totals	**632**	**321**	**310**	**130**	**36**	**93**	**2,591**	**1,475**	**1,116**

Source: Walker Parking Consultants, 2016

Both the overall public off-street and on-street parking supply are expected to be sufficient to support future parking demand in 2026; however several blocks are anticipated to experience parking shortages.

CONCLUSIONS/FINDINGS

Based on Walker's Survey Day observations, there are approximately 3,614 parking spaces available in the Study Area. During weekday conditions, we observed peak demand at 2:00 p.m. with 1,500 occupied spaces or 42% of capacity. The weekend occupancy rate was 28%, with 1,017 of the total available spaces occupied.

Walker adjusted the observed parking demand to account for Design Day conditions. The demand was increased by 14% on weekdays and 22% on weekends to account for seasonality of the uses. During design conditions, the typical weekday demand is estimated to be 1,722 spaces and the typical weekend demand is estimated to be 1,245 spaces. Overall, adequate parking is judged to be available within the Study Area during Design Day conditions.

The table below summarizes our findings by parking type during the Survey Day, Design Day, and 2021 and 2026 planning horizons. Although parking shortages are expected on some blocks, overall adequate parking is available within the Study Area to support demand over the next ten years. The blocks expected to experience parking deficits include:

- Block1, where the St. Peter and Paul Church and School is located,
- Blocks 8 and 15, where several redevelopment projects will introduce new office, restaurant, and entertainment space to the downtown, and
- Block 9, where several popular restaurants along Castell Avenue are located.

Table 35: Parking Demand Summary

		Weekday				Weekend			
		Survey	Design	2021	2026	Survey	Design	2021	2026
On-Street	Supply	743	743	743	743	743	743	743	743
	Effective Supply	632	632	632	632	632	632	632	632
	Demand	231	264	306	355	197	239	277	321
	Occupancy	31%	36%	41%	48%	27%	32%	37%	43%
	Adequacy	401	368	326	277	435	393	354	310
Public Off-Street	Supply	144	144	144	144	144	144	144	144
	Effective Supply	130	130	130	130	130	130	130	130
	Demand	44	50	58	67	22	27	31	36
	Occupancy	31%	35%	40%	47%	15%	19%	22%	25%
	Adequacy	86	80	72	62	108	103	98	93
Private Off-Street	Supply	2,727	2,727	2,727	2,727	2,727	2,727	2,727	2,727
	Effective Supply	2,591	2,591	2,591	2,591	2,591	2,591	2,591	2,591
	Demand	1,225	1,408	1,782	1,782	798	979	1,475	1,475
	Occupancy	45%	52%	65%	65%	29%	36%	54%	54%
	Adequacy	1,366	1,183	809	809	1,793	1,612	1,116	1,116
Total	Supply	3,614	3,614	3,614	3,614	3,614	3,614	3,614	3,614
	Effective Supply	3,352	3,352	3,352	3,352	3,352	3,352	3,352	3,352
	Demand	1,500	1,722	2,146	2,204	1,017	1,245	1,783	1,832
	Occupancy	42%	48%	59%	61%	28%	34%	49%	51%
	Adequacy	1,852	1,630	1,206	1,148	2,335	2,107	1,568	1,519

Source: Walker Parking Consultants, 2016

POLICIES, PRACTICES AND OPPORTUNITIES FOR IMPROVEMENT

WALKER
PARKING CONSULTANTS

POLICIES, PRACTICES AND OPPORTUNITIES FOR IMPROVEMENT

Prior to building any new public parking in downtown New Braunfels, Walker recommends the City consider changes to current policies and practices. The proposed changes are intended to help improve the overall delivery of parking services. These recommendations are based on input from stakeholders directly impacted by public parking policy and practices. In addition, the recommendations reflect Walker's analysis of current and future parking conditions, and assessment of current operations. This section begins with a review of existing conditions, followed by a summary of overall goals for the parking system, and ends with recommendations for improvement of the overall public parking system, which can be found within the sections of this report mentioned below. The recommendations for the public parking system can be scaled to support the various needs of a growing and active downtown market. The recommendations are organized and presented in the following categories:

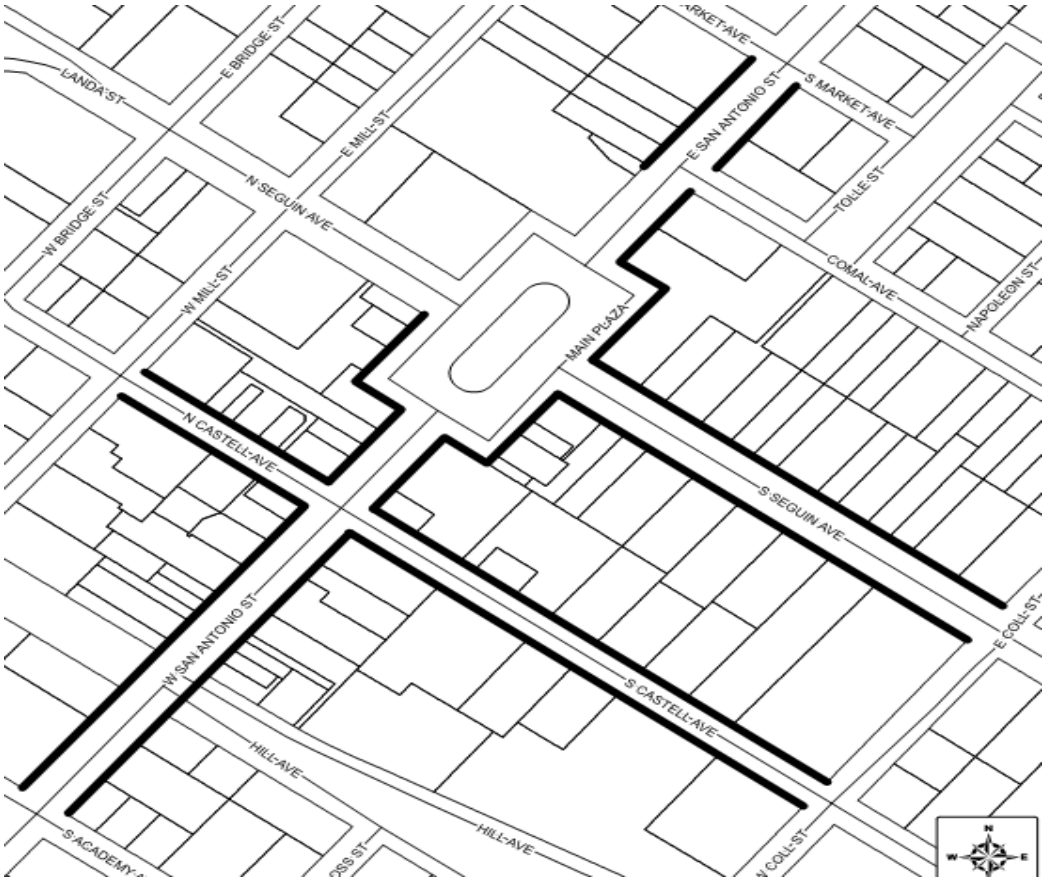
- **Enforcement**
  - Upgrade existing enforcement equipment to create efficiency and better record-keeping; switch from manual ticket-writing to tickets issued through handhelds.
  - Enforce parking time limits on a zonal basis instead of on a space-by-space basis. (This action mitigates the practice of long-term parking patrons moving their vehicles every two hours to avoid receiving a parking citation for overtime parking, by pulling into another nearby, short-term parking space, instead of simply storing the vehicle in a space intended for long-term use.)
  - Consider extending enforcement hours to include evenings and weekends to ensure turnover of prime parking spaces.
- **Demand Management**
  - Provide additional long-term parking options for employees and market the availability and location of these spaces to downtown stakeholders.
  - Advocate for and negotiate shared parking agreements between multiple private property owners and private property owners and the city. If required, be willing to compensate private property owners for making their parking available to the general public by either leasing their parking lot or by offering financial compensation (much less expensive than building a new parking structure).
- **Planning/Zoning**
  - Amend the parking element of the zoning ordinance to require developers to submit a parking plan as part of the overall site-plan for City Planner approval.
  - Review and revise minimum parking requirements for the downtown.
  - Revise the two-hour time limit zones; increase some on-street parking to a three-hour time limit.

- **Signage, Wayfinding, and Marketing**
  - Improve parking signage package including restriping on-street spaces, upgrades to pole signage, and installation of wayfinding signage throughout downtown.
  - Implement a continuous improvement model.
  - Implement parking planning workshops with local businesses, city government, and other stakeholders.
  - Create and implement a regular marketing and public relations program aimed at educating stakeholders about parking options and disproving myths about downtown parking.

EXISTING CONDITIONS

The City of New Braunfels uses a two-hour parking zone in the downtown commercial area as the primary means of encouraging turnover in on-street parking. The two-hour zone is delineated in the map below. Also shown is a sample of the signage used to relay the parking restriction.

Figure 21: Two Hour Parking Zone



Source: Walker Parking Consultants, 2016

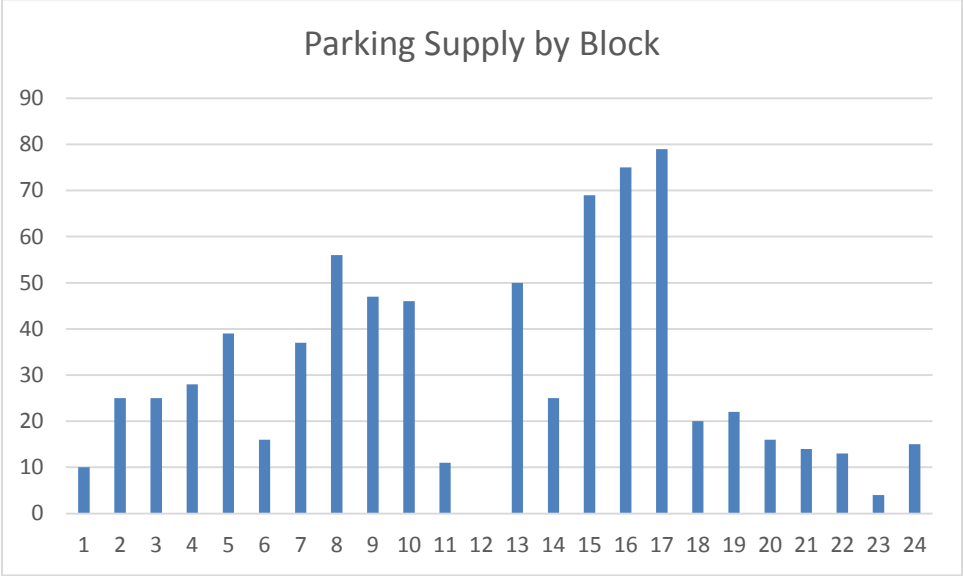
Figure 22: Two Hour Parking Zone Signage

Source: Walker Parking Consultants, 2016

The area covered in the two-hour parking zone serves several commercial, civic, and entertainment venues in downtown New Braunfels. The two-hour zone is in effect Monday-Friday, from 8:00 AM – 5:00 PM and does not allow parking overnight, from 1:00 AM – 4:00 AM, seven days per week. Parking is unrestricted in the downtown on Saturdays and Sundays.

On-street parking is managed and enforced by the City of New Braunfels. The on-street parking inventory in downtown New Braunfels (as collected by Walker) is delineated in the table below.

Table 36: On Street Parking Supply



Source: Walker Parking Consultants, 2016

The City currently employs its own parking enforcement officers who patrol the downtown for on-street parking violations. According to data provided by the City, enforcement officers spend approximately 47% of their total time patrolling the downtown two-hour parking zone. Enforcement officers hand-write violation tickets and, according to City officials, no enforcement technology is currently in-use. Enforcement officers take photographs for evidence in the event of a violation, however those photographs are not integrated into a violation management program.

Parking violations are issued on a graduated scale based on the number of violations received in a calendar year. Fines may be paid online via the city's website. Violation fees for on-street parking infractions are detailed in the table below.

Parking Violation Fee Schedule	
First Offense	Warning
Second Offense	$50
Third Offense	$200
Fourth+ Offense	$500

The following tables details warnings, violation collection success, and the cost per annual hour in 2015 (data provided by City officials).

2015 Violation Data		
Month	Warnings	Citations
January	31	2
February	29	2
March	45	2
April	36	5
May	26	4
June	43	4
July	28	4
August	13	2
September	8	4
October	17	4
November	10	2
December	7	0
Totals	**293**	**35**

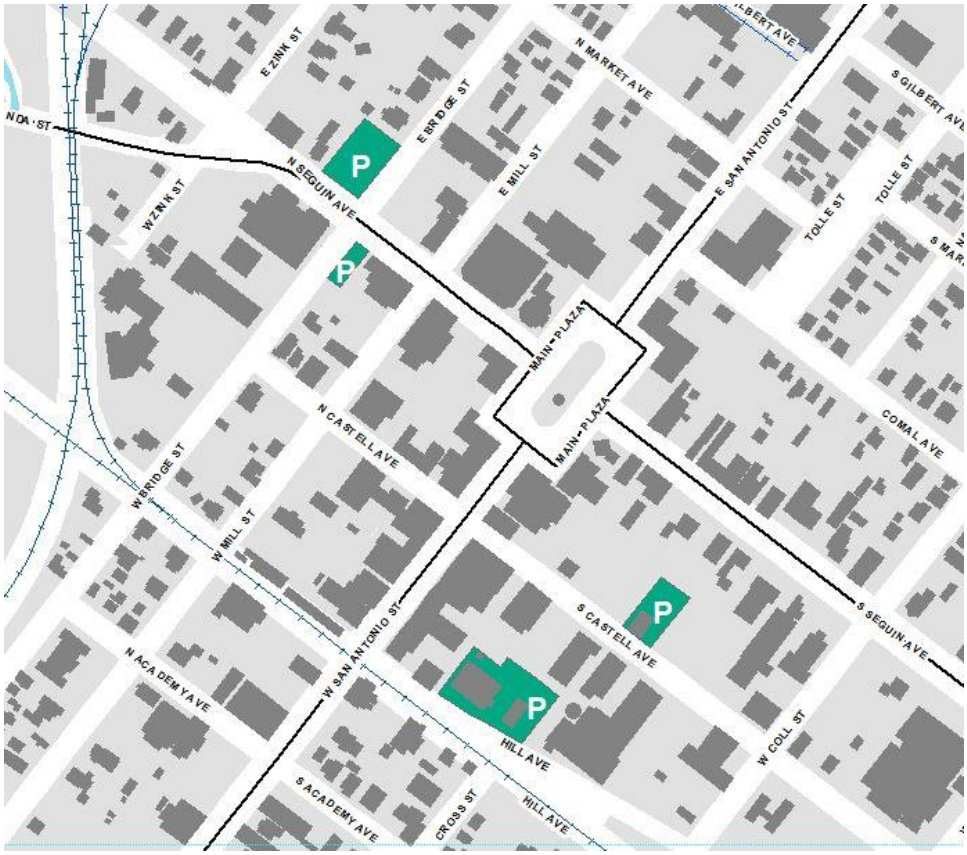
2015 Violation Collection Data	
Fines Assessed	$998
Fines Collected	$837
Collection Success	**83.9%**

Cost of Enforcement	
Annual Spend	$17,790
Hours/Day	3.75
Cost/Annual Hour	**$4,744**

Of the 328 observed and documented parking violations, 10.67% were repeat offenders, resulting in a citation. Citations are payable according to the Fee Schedule outlined above.

In addition to its on-street inventory, the city also advertises public parking at four surface lots. A map and table of the aforementioned off-street parking is below.

Figure 23: Public Off-Street Parking Lots



Source: City of New Braunfels, 2016

PUBLIC SURFACE LOTS				
Lot	**Owner**	****Spaces**	**Rate**	**Duration Limit**
Seguin @ Bridge (NE)	Comal County	42	Free	Unlimited
Seguin @ Bridge (SW)	Comal County	22	Free	Unlimited
234 Castell Ave	*First Protestant Church	67	Free	Unlimited
Hill Ave b/w San Antonio & Coll	City of New Braunfels (Fire Dept.)	13	Free	Unlimited

**The city advertises parking as being free and available Monday – Saturday, with First Protestant Church having exclusive access on Sundays.*
***Space counts are approximate*

Contrary to the on-street parking inventory, the city advertises the off-street spaces as unlimited and available for longer-term parking on the City website. According to stakeholders, this is particularly helpful to individuals visiting downtown for events at the civic center. The City advises guests and patrons of availability through maps on the parking page on the City's website, such as the image in Figure 23.

The on-street spaces within the two-hour parking zone are delineated by a green "2 Hour Parking" symbol painted on the ground on the driver's side of each two-hour parking space. Additionally, the city has signage on street poles directing visitors/patrons to the off-street parking spaces if on-street parking is full. The two-hour parking zone map is also available on the City's website.

The New Braunfels zoning code does not have minimum parking requirements for any new development in the downtown unless an existing building is being expanded by more than ten percent, in which case the standard parking requirements are only applicable to the expanded area (New Braunfels, Texas, Municipal Code art V, § 144-5.1-1(b)). The City also recognizes the concept of shared-parking in its zoning ordinance. All variances and shared parking provisions must be approved by the city planning department as part of the overall site-plan.

GOALS AND OBJECTIVES OF PARKING SYSTEM

The goals of any parking system are centered on providing the most efficient and friendly parking experience to patrons and visitors. This is accomplished through various parking policies that promote a positive customer experience while ensuring that supply is available for commercial and civic activity. Management of parking supply plays a key role in ensuring that visitors and patrons find parking quickly and efficiently while assisting in mitigation of unwanted on-street parking by employees and residents. Walker's recommendations for the City of New Braunfels incorporate the following strategies that promote effective management of downtown parking supply:

- Prudent use of available parking technologies;
- Clear, effective on-street parking enforcement;
- Assistive zoning strategies, such as shared parking provisions for new development;
- Clear and understandable signage and wayfinding;
- Management of available on and off-street parking demand; and
- Promotion of space availability and a "park once" philosophy.

PARKING ENFORCEMENT

Additional parking enforcement is often viewed in a negative light primarily due to the way in which enforcement is presented to the public. Rather than being punitive in nature, the City has designed an enforcement program that is rather inexpensive and serves as a minor punishment when a parking violation occurs. The City collected on 88.78% of its issued violations in 2015, suggesting that the penalties for parking violations are reasonable. Additionally, 59.5% of issued violations, including warning tickets, were written due to "overtime parking" – vehicles parked in excess of the designated parking windows in each zone.

The mission of a downtown New Braunfels Parking Compliance Program would be to provide hospitality, tourism and public safety services to local citizens, businesses and visitors, in addition to enforcing parking regulations. The PEOs (parking enforcement officers) should be required to complete a multi-faceted training program in hospitality and customer service, emergency

response and first aid, public transportation and City services. They should work directly with local stakeholders and serve as community advocates. The current PEOs should, if this has not been completed already, complete a training program similar to the one mentioned above.

The City should consider extending enforcement hours to include evenings and weekends. This time frame is currently not enforced, potentially leaving a void in the City's parking plan. **Walker estimates the City's cost per additional hour of enforcement to be $4,744.**

City officials noted that the downtown is only enforced for approximately 3.75 hours per day. This, combined with a violation warning system, results in very few citations being issued and, therefore, collected upon. Additionally, this leaves approximately 53% of the enforcement hours essentially unenforced. It is reasonable to assume that many more violations are occurring during both the hours of enforcement and outside current hours of enforcement.

Walker recommends that the City use an electronic citation issuance and parking enforcement management system that allows electronic tire chalking and maintains electronic records of enforcement activity. Systems are available that provide the enforcement officer with information on a "live" or "real-time" basis while in the field via cellular technology, but most require that base data be downloaded to the handheld units from a local or remote application server before departure, and are not networked again until docked at the end of the shift. Citation and configuration data is then transferred to the base application server to be ready for the following business day.

In the past few years, many systems have begun offering "apps" for parking enforcement that can be used with most Android- and Apple-based cellular phones and tablets. The "apps" are downloaded, accessed, and used in very similar ways to most other smart phone apps. This type of system can be a great option for small- to medium-sized operations as it can significantly reduce upfront costs. The traditional electronic handheld ticket-writer can be quite expensive when compared to the cost of a standard smart phone. Most of these applications, both the enforcement software as well as the back-end management system, are stored remotely and accessed through standard web-browsers, thereby significantly reducing the up-front hardware costs for new computers and equipment.

Parking management systems are typically networked to a service provider's central server computer, which can often be networked to exchange information with the local DMV-directory-license-lookup services. These services supply addresses, facilitating follow-up letters, collection efforts, etc. Some service providers can also perform all of the processing between the citation and the money collection, off-loading the related overhead, for small fees passed on to the payer or for portions of the ultimate collection amounts.

The most significant advantages over the old handwritten systems are as follows:

1. Information is automatically downloaded directly to the system, avoiding data entry errors and transcription errors from sometimes-illegible handwritten citations;
2. Most systems are programmed or modified specifically for the client; and
3. Options such as scofflaw programs are included with a permit database, so no citations will be written on permitted vehicles. Handhelds can record occupancy data with special time intervals so the handheld keeps track of warning time (like chalk marks on tires). Some systems also use bar code reading of licenses or permits.

Walker anticipates the cost of a handheld electronic citation at approximately $5,000 per handheld device, and a one-time fee of approximately $5,000 for back-end processing and reporting software.

Using handhelds for parking enforcement is a best practice that is employed by many cities including Arroyo Grande, CA; Santa Rosa, CA; Pittsburgh, PA; Washington, DC; Baltimore, MD; Chicago, IL; Seattle, WA; Urbana, IL; and Easton, PA, to name a few.

DEMAND MANAGEMENT

There are areas within each zone that temporarily experience high levels of demand that strain local parking supply, while at the same time, nearby areas experience a parking surplus. Even though available supply may exist within one or two blocks, these localized "hot spots" form perceptions that parking supply is inadequate. Often the solution includes a combination of improving access to the unoccupied public and private supply and long-term consideration for building more proximate supply. It is Walker's professional opinion that current parking challenges can be improved with a management solution that is foundational for a long-range plan that may include adding structured parking capacity. Many communities are rethinking how best to address the challenges of parking and pursuing management solutions before committing to a long-term capital investment. This course of action may improve perceptions and increase access to available supply. At the very least, management improvements can help the city mitigate future capital costs by maximizing the use of existing public resources.

The parking utilization data and market observations indicate that, outside of activities at the Civic/Convention Center and the Farmer's Market, most on-street patrons are parking for less than two hours and are most likely downtown visitors. Although several businesses have dedicated off-street parking lots, it is reasonable to assume that some employees are parking in valuable on-street parking spaces and relocating vehicles to avoid violations.

Additional parking demand along Castell Avenue is anticipated with the proposed addition of two restaurants between San Antonio Street and Coll Street, which would stress the demand for parking along Castell Avenue during peak times. Although public parking is available both on and off street along Castell Avenue, input from stakeholders would suggest that the additional demand would stress the parking supply in this area.

While free, long-term parking is of value to downtown visitors and employees, this arrangement can strain parking supply in high-demand areas. Available parking in high-demand areas is essential to commercial success and can be achieved by amending time limits on available parking supply, both on- and off-street.

INCREASE USAGE OF COMAL COUNTY GARAGE

The Comal County Garage is a 133-space off-street parking facility that provides parking primarily for the Comal County Courthouse and the Courthouse Annex. During Walker's field survey, we found that this facility was significantly underutilized. During the typical weekday afternoon peak hour of 2 p.m., 40 spaces were observed to be vacant.

The Comal County Health Department is located northeast of and adjacent to the Comal County Courthouse. Parking at this facility is provided in the basement of the building and an adjacent surface parking lot. Total off-street parking on this block is 187 spaces. During the Study Area's typical weekday afternoon peak hour of 2 p.m., 127 vacant spaces were observed.

Walker recommends that representatives of the City of New Braunfels and Comal County meet to discuss ways to make county-owned parking spaces available to employees working in downtown New Braunfels. While we understand that there may be hesitation to open up the Comal County Garage to public parking, other county employees, such as those who work at the Comal County Health Department, could be relocated to the garage. The surface parking spaces vacated by county employees, plus the existing vacant spaces, could be then used by the downtown New Braunfels employees. The field work performed for this project suggests that more than 100 spaces are going unused on a regular basis and could instead be used for long-term downtown employee parking. This practice could free up additional parking for downtown retail customers.

TWO- VS. THREE-HOUR TIME LIMITS

As discussed earlier, some stakeholders provided feedback that a two-hour time limit was insufficient for purposes of carrying out their business in the downtown. Given the relatively low parking occupancies in a majority of the downtown, we believe that it would not be harmful to increase the two-hour posted time limits to three hours, except for the core area of the downtown, near the Main Plaza.

We recommend changing existing two-hour posted time limits to three hours on all on-street parking spaces with the following exceptions:

- Block 10 – bordered by Market Street, E. San Antonio Street, N. Seguin Avenue, and Mill Street, all block faces;
- Block 9 – bordered by N. Seguin Avenue, W. San Antonio Street, Castell Avenue, and Mill Street, all block faces;
- Block 15 – bordered by W. San Antonio Street, Castell Avenue, Coll Street, and Hill Avenue, only Castell Avenue block face

- Block 16 – bordered by W. San Antonio Street, S. Seguin Avenue, Coll Street, and Castell Avenue, only W. San Antonio Street and Castell Avenue block face
- Block 17 – bordered by E. San Antonio Street, Comal Avenue, Coll Street, and S. Seguin Avenue, only E. San Antonio Street block face

The figure below illustrates the two-hour versus three-hour on-street parking zones.

Figure 24: Recommended Two Hour Time Limit Zone

Source: Walker Parking Consultants, 2016

The City should monitor on-street parking occupancies and if and as required, expand the size of the two-hour parking zone to include block faces that regularly reach or nearly reach full capacity. Shorter time limits facilitate vehicle turnover and can reduce parking space occupancy.

We recommend no other changes to posted time limits at this time. However, the city should regularly monitor on-street space usage and adjust time limits if and when it finds that 1-2 vacant spaces cannot be regularly be found on a block face during typical busy hours.

PARKING PLANNING AND ZONING

There are areas of downtown New Braunfels that temporarily experience high levels of demand that strain local parking supply, while nearby areas experience a substantial parking surplus. Even though available supply may exist within one or two blocks, these localized challenges form perceptions that parking is inadequate. The community can either address the parking challenges by building more supply, better managing the existing resources, or a measured combination of both. Many communities are rethinking how best to address the challenges of parking and are pursuing management solutions before committing to long-term capital investments. This course of action is proven to improve perceptions and increase access to available supply.

The following exhibit provides an overview of how communities are starting to think about parking planning.

Figure 25: Community Approach to Parking Planning

Old Parking Paradigm	New Parking Paradigm
• "Parking Problem" means inadequate parking supply.	✓ There are many types of parking problems (management, pricing, enforcement, etc.)
• Abundant parking supply is always desirable.	✓ Too much supply is as harmful as too little. Public resources should be maximized and sized appropriately.
• Parking should be provided free, funded indirectly, through rents and taxes.	✓ Users should pay directly for parking facilities. A coordinated pricing system should value price parking with on-street the highest.
• Innovation faces a high burden of proof and should only be applied if proven and widely accepted.	✓ Innovations should be encouraged. Even unsuccessful experiments often provide useful information.
• Parking management is a last resort, to be applied only if increasing supply is infeasible.	✓ Parking management programs should be applied to prevent parking problems.

Source: Walker Parking Consultants, 2016

As additional development makes its way through downtown New Braunfels, the City should review the zoning code to ensure that parking is available for employees and patrons of new development alike. Downtown New Braunfels is exempt from minimum parking requirements in the zoning code unless there is an addition to an existing structure in excess of ten percent of the original square-footage of the existing structure. The City also allows for shared parking as approved by the City Planner for developments that meet certain criteria as explained in the zoning code.

PARK ONCE DISTRICT

A widely-accepted principle or ideal shared by parking planners is the concept of a "park once district." This ideal is achieved when parking patrons in a specified geographic area park their vehicles a single time over the course of a day and do not relocate their vehicle to a different parking spaces within this specified geographic area.

We recommend this concept for New Braunfels.

To further promote this concept, we recommend that time limits be enforced on a zonal basis. This discourages patrons from moving their vehicle to a nearby or adjacent parking space located within the park-once district, to avoid a ticket. This recommend practice of enforcing parking time limits by zone is especially targeted to employees who may be in the habit of moving their vehicle periodically throughout the course of the day and occupying short-term parking spaces intended to be used by downtown merchant customers.

Many other cities, including Whittier and Santa Monica, California, have implemented a park once district best practice. The cities of Valparaiso, Indiana; Houston, Texas; and Palo Alto, California enforce parking time limits on a zonal basis.

REVIEW OF ZONING ORDINANCE

Walker reviewed the parking element of the City of New Braunfels zoning ordinance, specifically Section 5. Development Standards of the City's zoning ordinance, 5.1 Parking, Loading, Stacking, and Vehicular Circulation. Based on industry standards as documented within the National Parking Association's ("NPA") and Parking Consultant Council's *Recommended Zoning Ordinance* Provisions, and our professional opinion, we recommend the following changes:

- Delete the option for a site plan to include a two-way drive aisle with angled parking on both sides of the drive aisle. We believe this configuration is confusing to the driver and represents a poor functional layout. Two-way circulation works well with 90-degree parking and one-way circulation works well with angled parking. However, a two-way aisle with angled parking is an inefficient layout and forces motorists to double their efforts to circulate a parking facility and find an open space.
- Subsection 5.1-1 General Provisions of the zoning ordinance chapter on parking exempts developers from meeting off-street parking space requirements unless the building is being expanded by more than ten percent. And then, the requirement is that the area enlarged by more than ten percent is required to meet minimum parking requirements. We recommend that when there is a change in land use, the city consider requiring the

applicant to meet the minimum parking requirements of the proposed change in use. The reason for this is that there is a considerable difference in parking demand generated by different uses. For example, sit-down food and beverage establishments generate significantly more parking demand than general offices. The NPA's recommendation for general business offices is 3.8 spaces per thousand square feet of gross floor area (< 25,000 square feet) and for fine/casual dining with a bar, the recommendation is 20 spaces per thousand square feet of gross floor area.

The following is a table that compares a sampling of the New Braunfels minimum parking requirements with the NPA recommendations. New Braunfels' zoning code specifies minimum parking requirements for many different land uses, including very specific commercial uses. The NPA's recommendations encompass the more general categories of retail, restaurant, office, and residential.

Table 37: Comparison of New Braunfel's vs. NPA Parking Minimums and Recommended Changes

Land Use	New Braunfels	NPA	Recommended Change/No Change Needed
Multifamily, Appartments, Hotel Units	One-bedroom apartment or unit . . . 1 ½ Two-bedroom apartment or unit . . . 2 Each additional bedroom . . . ½ Each dwelling unit provided exclusively for low income elderly occupancy . . . ¾	1.65/ Dwelling Unit - Rental 1.85/ Dwelling Unit - Condo	No Change
One Family Dweling, Detached	2 spaces per dwelling	< 2000 sq ft: 1/ Dwelling Unit 2000 to 3000 sq ft: 2/Dwelling Unit; over 3000 sq ft: 3/dwelling unit	No Change
Restaurants and All Other Similar Dining or Drinking Establishments	1 for each four seats for patron use, or 1 for each 100 sq. ft. of gross floor area, whichever is greater	Fine/Casual Dining (with Bar) - 20/1,000 sq ft GFA Family Restaurant (w/o bar) - 15/1,000 sq ft GFA Fast Food - 15/1,000 sq ft GFA	For café style restaurant only open during breakfast and lunch - No Change Increase the Parking requirement for restaurants serving dinner or with bars
Retail Establishments (less than 100,000 sq. ft.)	1 for each 200 sq. ft. of gross floor area	2.75/ 1,000 sq ft GFA (not in a shopping center)	Reduce the parking requirement
Grocery Stores (less than 100,000 sq ft)	1 for each 200 sq. ft. of gross floor area	Grocery Store - 6.75/1,000 sq ft GFA	Increase parking requirement
Office and Services Uses	1 for each 300 sq. ft. of gross floor area	3.8/1,000 sq ft GFA up to 25,000 sq ft; scaled between 25,000 to 100,000 sq ft; 3.4 for 100,000 sq ft; scaled between 100,000 and 500,000 sq ft; 2.8/1,000 sq ft GFA over 500,000 sq ft Data Processing/Telemarketing/Operations Offices - 6/1,000 sq ft GFA	No Change
Medical Clinics	1 for each 300 sq. ft. of gross floor area	Medical Offices (not part of hospital campus) - 4.5/1,000 sq ft GFA	Increase parking requirement
Hotel	1.1 for each bedroom	1/ Unit or Room plus 2 for owners/managers	No Change

Source: Walker Parking Consultants, 2016

EVAULATION OF PARKING PLANS

The City should require as part of its site plan approval process, a review of parking. This review should check for the following:

- Parking geometrics that comply with the City's zoning ordinance;
- Proposed parking capacity that meets or exceeds City's minimum parking requirements except when the subject site is exempted per city code; and
- Adherence to City's legal setbacks and height restrictions.

PARKING RATES

We recommend no changes to existing parking rates. We understand that on-street parking is now provided at no charge to users. At this time in New Braunfels, introducing paid parking would prove to be highly controversial and limited in its effectiveness. Instead of implementing paid parking, we recommend that the other measures identified within this report be implemented. As the downtown continues to densify, the city should revisit this issue in another 3-5 years.

PAYMENT-IN-LIEU OF PARKING

An in-lieu fee program provides property owners with flexibility when developing/redeveloping their properties and prevents small fragmented parking areas in the downtown that detract from the downtown character and pedestrian-oriented environment. Instead of providing their own parking, developers can pay an in-lieu fee to the city that is then used for a city downtown parking program.

Before setting a parking-in-lieu fee, we recommend that the City consider the following:

- In-lieu fees work well in cities where there is rapid and significant development in a defined area that can be served by a municipal parking facility. However in situations where development is not robust, developers can become frustrated that the monies that they funded to the city are sitting in a bank account, not being put to immediate use.
- Another concern of in-lieu fees is that developers sometimes develop a feeling of entitlement, thinking that because they paid into this in-lieu fund, that their employees or customers should not then have to pay for parking.
- The higher the in-lieu fee cost, the greater the incentive for developers to build their own parking spaces, which are unlikely to be available for sharing with the general public parking supply, thereby potentially being of less value to the City than publicly controlled spaces;
- The cost per net new space added to the public parking system will be higher for parking structures constructed on existing public parking lots;

- The "right" price for a parking-in-lieu fee is ultimately a policy decision, not just a projection of construction costs, and is based on the specific needs of a City.
- A structured parking space is the most expensive method by which a city can provide parking and access to its downtown. A policy of building structured parking to address parking demand may also conflict with the city's broader transportation, land use, and environmental goals. Further, construction of a parking structure of a desired number of spaces may require the accumulation of in-lieu fees over an undetermined length of time. Improving access using methods other than new structured parking, including surface parking, sharing existing private parking spaces, shuttles to peripheral locations, bicycle and pedestrian improvements or other measures related to transportation demand management strategies may allow the city to respond more quickly and nimbly to parking and access challenges in its downtown than would the long-term planning and costs associated with structured parking.

Determining the cost per space of building additional structured parking is one approach cities have taken to set in-lieu parking fees. However, to establish a more precise nexus, cities often project the amount of required parking spaces generated by anticipated development over a specified time frame. The cost of providing a mix of parking and other transportation and access alternatives is then divided over the number of required spaces that have been forecast. This method requires agreed-upon projections for future development, and the desired policies for parking and parking alternatives, in New Braunfels' downtown.

Cities that have in-lieu parking fees are numerous. Examples include the cities of Miami and Orlando, Florida; and Santa Monica, California.

SIGNAGE, WAYFINDING, AND MARKETING

It is Walker's professional opinion that signage and wayfinding throughout downtown should be improved as an overall step toward better maximization of existing parking assets. The current two-hour parking zone is delineated by painted graphics on the street. This should be restriped annually and pole signs should be utilized for this zone as well. Some examples of pole signage can be found further in this section.

A key component used to market parking is to provide consistent signage identifying public parking areas within the downtown. While the City currently has several small parking lots available for public use, the lots are not consistently signed for public parking, or signed at all, and are likely to go unnoticed by visitors unfamiliar with the area. We strongly encourage developing and implementing a consistent sign package that identifies and communicates the presence of the public parking lots.

ALTERNATIVES ANALYSIS

WALKER
PARKING CONSULTANTS

ALTERNATIVES ANALYSIS

There are cases where parking management alone is not the solution. While an organized parking system provides the framework for future growth, additional supply in the form of a parking structure or lot may be required to support new development. It is rare that a community would build a fully subsidized, stand-alone parking facility without clear plans for new commercial development. The preferred approach is to develop new parking in coordination with highly dense mixed-use projects. This approach maximizes development space by integrating parking into the development program.

Based on discussions with the City, there are several small redevelopment projects planned, but no dense, mixed-use projects in the planning horizon. However, New Braunfels has experienced significant population and economic growth over the last ten years and is expected to continue to grow. This growth may warrant the development of a stand-alone parking structure.

In addition to the projected economic growth in the area, New Braunfels has a thriving tourism industry. Walker's survey was conducted in January, when tourism in the area is slow. While our observations were adjusted to account for peak demand during the summer months, our Design Day projections may not reflect the true peaks experienced by the City and could be verified with a secondary survey during peak demand. It is our understanding that parking in the City becomes difficult during the peak tourism season and additional parking options may be needed.

This section provides a general overview of basic parking economics that must be considered when planning for a new parking structure. A brief discussion is provided on capital costs, operating expenses, breakeven pricing, structural repair budget, and minimum parking dimensions. In addition, the advantages and disadvantages of structured, surface, and shared parking options available to downtown New Braunfels are discussed in detail.

CAPITAL COSTS

Walker understands that future parking improvements may be developed as a stand-alone parking ramp or incorporated with the design of a future mixed-use building. A parking facility that is built into a project, as either the upper or lower floors of that development compared to a stand-alone parking facility, requires that the garage use short-span construction. Short-span construction uses an increased number of columns to support the weight of the structural elements above it.

In short-span construction, the column grid is roughly 30 feet on center. The efficiencies of short-span construction are less than long-span construction because of the column projections that interfere with the parking layout. A typical short-span construction garage has design efficiency in the range of 400-450 square feet per space, depending upon the geometrics of the footprint.

If the ramp is a stand-alone structure, utilizing long-span construction, the columns can be located at the front of the parking stalls so that there are no column projections. The efficiency

of the garage can be increased to an approximate range of 315 to 350 square feet per space, depending upon the geometrics of the footprint. The increase in efficiency is due to the ability to increase the number of parking spaces inside the same footprint.

A general guideline for determining the conceptual estimate of probable cost for a parking structure is to apply a cost per space figure to the target capacity. The cost of parking structures vary greatly based on location, architectural features, sustainability features, and whether the facility is above or below-grade. A reasonable range for an above-grade, 200-300 space parking facility is $15,000 to $18,000 per space in construction costs, assuming long-span construction, a site that allows for the design and construction of a facility that can average 300-325 square feet of buildable floor area per parking space, and modest architectural treatments. The cost per space can increase significantly when built below ground, or includes multi-use retail and office space. Additionally, soft costs, including project financing, developer fees, design fees, soils and materials testing, etc. could add another 20-35% of construction costs. Land costs are an additional consideration.

OPERATING COSTS

Expenses can vary dramatically since these depend on a number of independent variables. Traditional expenses can include costs associated with labor, utilities, daily maintenance, supplies, management and accounting, and insurance. Key factors in determining operating costs include the proposed hours of operations, type of parking access and revenue controls, and the application of active or passive security measures.

The operating expenses for a parking facility are typically presented on a cost per space basis. Walker's research indicates actual operating expenses that range from $150 to over $1,000 per space annually. The operating costs are lower at facilities that do not maintain revenue and access controls, and have limited hours of operation. Conversely, operating costs are higher at facilities that are staffed, that monitor access to the property with revenue and access controls, and operate 24 hours 7 days a week. All facilities require some degree of daily janitorial service that includes trash removal, sweeping, and minor repairs and maintenance such as lighting replacement. These responsibilities are often delegated to a city's public works department, if a parking department does not exist.

STRUCTURAL REPAIR BUDGET

For new parking structures, in addition to operating expenses, Walker highly recommends that funds be set-aside in a sinking fund, on a regular basis, to cover structural maintenance costs at a minimum of $75 per structured space annually. Once a sinking fund is established, contributions to this fund accumulate over time and are available to cover structural maintenance and structural repairs. Even the best designed and constructed parking facility requires structural maintenance. For example, expansion joints need to be replaced and concrete invariably deteriorates over time and needs to be repaired to ensure safety and to prevent further damage.

The structural maintenance cost typically represents the largest portion of the total maintenance budget. Property owners tend to grossly underestimate the structural maintenance cost and do not budget adequately for timely corrective actions that must be performed to cost effectively extend the service life of the structure. The cost of structural maintenance is relatively small considering the potential waste of the improvements associated with the failure to perform proper maintenance on a timely basis.

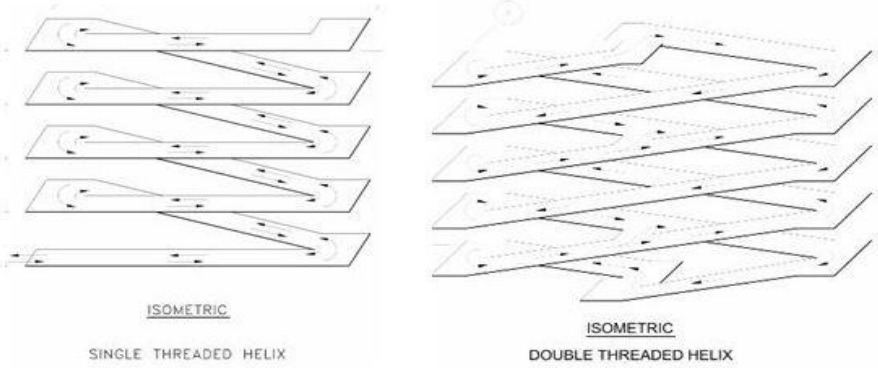
Periodic structural maintenance includes items such as patching concrete spalls and de-laminations in floor slabs, beams, columns, walls, etc. In many instances there are maintenance costs associated with the topping membranes, the routing and sealing of joints and cracks, and the expansion joint repairs. The cost of these repairs can vary significantly from one structure to another. The factors that will impact the maintenance cost include, but are not limited to, the value the owner places on the maintenance of the facility, the local climate, and the age of the structure.

MINIMUM PARKING STRUCTURE DIMENSIONS

There are several variables and options to consider when selecting the type of structure, including the desired traffic flow (one-way or two-way), the type of users, the Level of Service (LOS), and height restrictions. The following table provides the minimum dimensions for two types of structures, as well as a variation on the level of service. Characteristics of a single-threaded helix include two-bays, two-way traffic flow, and 90-degree parking, with the motorist ascending one floor for every 360-degree revolution. By contrast, a double-threaded helix features angled parking and one-way traffic flow, providing a continuous travel path up and then down through the structure. In a double-threaded helix, the motorist climbs two levels for every 360-degree revolution, thus requiring a longer site than a single-threaded helix.

Figure 26: Minimum Parking Structure Dimensions

Garage Type	Traffic	Space	LOS D Dimensions	LOS A Dimensions
Single Threaded Helix	Two Way	90°	120' x 135'	120' x 187'
Double Helix	One Way	75°	112' x 188'	112' x 282'



Source: Walker Parking Consultants, 2016

Parking structures could be built on smaller footprints. However, implied in this discussion is the desirability to achieve a relatively efficient parking structure design, as measured by square feet of floor area per each parking space.

WALKING DISTANCE

Pedestrian safety and comfort involves two factors: the ability of vehicles to move to and from the area without or with limited pedestrian conflict and, the ease of use by pedestrians with consideration of the walking path and distances to and from the facility.

Walking distance varies based on the patron user group as well as the environment of the surrounding area in which the patron must walk. To aid in estimating the appropriate walking distance, a Level of Service (LOS) rating system is used for evaluating appropriate walking distances based on specific criteria. Several factors impact the walking distance that a typical person will consider reasonable. These include climate, perceived security, lighting, and whether it is through a surface lot or inside a parking structure. LOS "A" is considered the best or ideal, LOS "B" is good, LOS "C" is average and LOS "D" is below average but minimally acceptable.

The following table includes the level of service walking distances for various parking environments. Walker applies the level of service for outdoor/uncovered parking when considering shared parking opportunities in Downtown New Braunfels.

Table 38: LOS Conditions: Walking Distances

Level of Service Conditions	A	B	C	D
Outdoor/Uncovered	400 ft.	800 ft.	1,200 ft.	1,600 ft.
Through Surface Lot	350	700	1,050	1,400
Outdoor/Covered	500	1,000	1,500	2,000
Climate Controlled	1,000	2,400	3,800	5,200
Inside Parking Facility	300	600	900	1,200

Source: Walker Parking Consultants, 2015

For purposes of comparison or frame of reference, the parking used during typical days at shopping centers is designed to provide LOS A and B, while the parking that only gets used for a few hours on the busiest days of the year might be designed for LOS C. Additionally, employee parking at a shopping mall is most often provided at LOS C, due to the willingness of employees to walk farther than customers and the desire to provide customers with the most proximate parking options. We recommend striving to provide adequate parking to specific user groups using the following LOS guidelines.

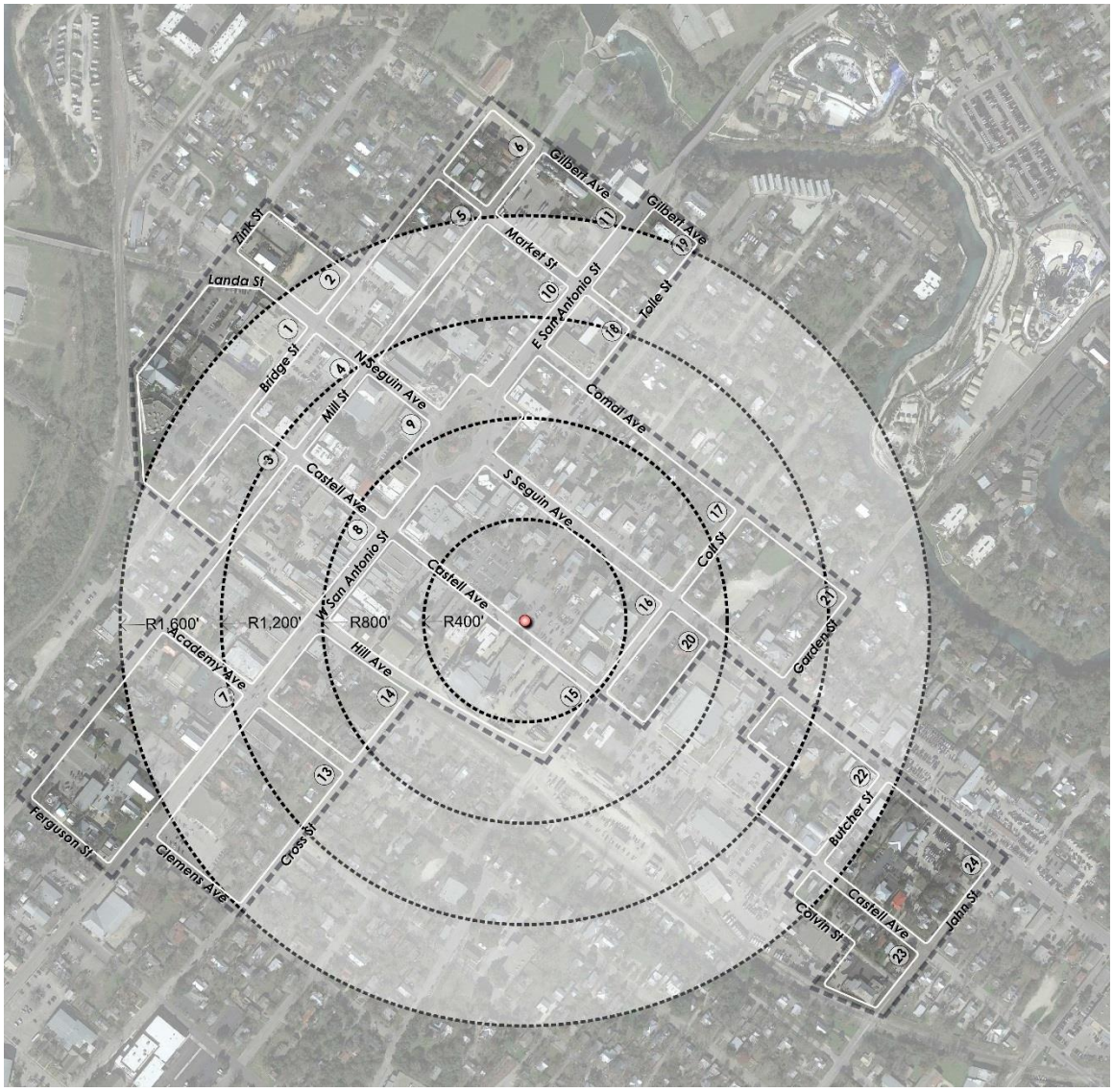
For example, the following figures show 400, 800, 1,200 and 1,600 foot radii (LOS A through D) from the public parking lots on Blocks 2 and 16. Many of the shops, restaurants, and bars located along Castell Avenue and in the plaza are located within 800 feet of the parking lot on Block 2; however, because the destination cannot be seen from the parking lot, the walking distance may be perceived as too long. As stated earlier, improved signage and wayfinding would help guide both vehicles and pedestrians, minimizing the perceived distance. This lot could also be used to support employee parking from businesses in the area in order to leave the closest and most convenient spaces available to customers.

Figure 27: Walking Distances – Block 2

Source: Google, 2016

Again, many of the restaurants and bars along San Antonio Street and Castell Avenue are located within an 800 foot walking distance from the public lot on Block 16 and could be used by customers and employees alike. In fact, the nearly the entire Study Area is located within 1,600 feet, or less than a ten minute walk, of the public lot on Block 16.

Figure 28: Walking Distances – Block 16



Source: Google, 2016

STRUCTURED PARKING OPTION

The study area was evaluated to determine the optimum locations for a parking structure based on existing conditions and projected shortages due to known developments. Currently, the projects on Blocks 8 and 15 are anticipated to create a 300+ space shortage during peak conditions[2]. As the City grows and parking demand increases, it is important to plan the parking to grow with the expansion, in order to continue to meet the growing parking demands.

[2] This shortage should be re-evaluated after parking occupancy data is collected during the peak summer season to verify seasonality changes in the downtown area.

While Walker's parking study indicated the densest parking demands are anticipated to occur in the core area around Castell Avenue and San Antonio Street; there are limited opportunities to develop structured parking in this area, and any properties identified for redevelopment would need to be purchased by the City. Additionally it is equally important to maintain a cohesive, connected, and walkable central business district, where parking does not break up the block and disrupt pedestrian flow.

It is our understanding that the 114-space private lot behind the Chase Bank on Block 16 has previously been identified as a potential site for development through a public private partnership with the property owner. Walker considered four variations of a parking structure located on this site, one with retail space on the ground tier, one that wraps around the existing historic structure, and two with parking on the ground floor. A structure of approximately 460 spaces could be built on this site – 346 to accommodate the projected parking shortage and 114 to replace the displaced lot.

Figure 29: Structured Parking on Block 16

Source: Google & Walker, 2016

OPTION 1

The Option 1 garage is a three-bay, one-way traffic flow, single-threaded structure with a footprint of 180' by 272'. The overall structure could consist of 3.5 to 4 levels of parking, and provide between 460 and 535 parking spaces. The estimated order-of-magnitude construction cost per-space is between $17,000 and $21,000, excluding the cost associated with land/building acquisition, environmental remediation that may or may not be needed, utility relocation costs, geotechnical engineering impacts, demolition costs, and other soft costs such

as design or financing fees. Based on a 460-space facility, the total estimated construction cost is between $7,820,000 and $9,660,000.

There are several advantages and disadvantages associated with Option 1 including the following:

Pros:

- The garage is ideally located within a short walking distance to major demand generators
- The land parcel is of sufficient size to develop an efficient parking structure

Cons:

- Requires the demolition of the Communities is Schools of South Central Texas building
- The City will need to purchase the property or enter into a public private agreement with the property owner
- A prime parcel of available land in the downtown area is no longer available
- The capacity of the existing lot needs to be added to the projected parking deficit/design capacity of the new garage.

OPTION 1A

As a modification to the first option, Walker considered a structure of the same footprint with retail located on the ground floor (Option 1A). However, due to the increased parking demand generated by the ground floor retail, we recommend a garage of 550 spaces. The overall structure will consist of five stories (four stories parking) and have a design capacity of approximately 540 spaces.

The estimated construction cost per-space is between $17,000 and $21,000, excluding the cost associated with land/building acquisition, environmental remediation that may or may not be needed, utility relocation costs, geotechnical engineering impacts, and demolition costs. Based on a 540-space facility, the total estimated construction cost is between $9,180,000 and $11,340,000.

There are several advantages and disadvantages associated with Option 1A including the following:

Pros:

- The garage is ideally located within a short walking distance to major demand generators
- The land parcel is of sufficient size to develop an efficient parking structure
- Incorporates retail space on the ground floor to maintain a central business district look

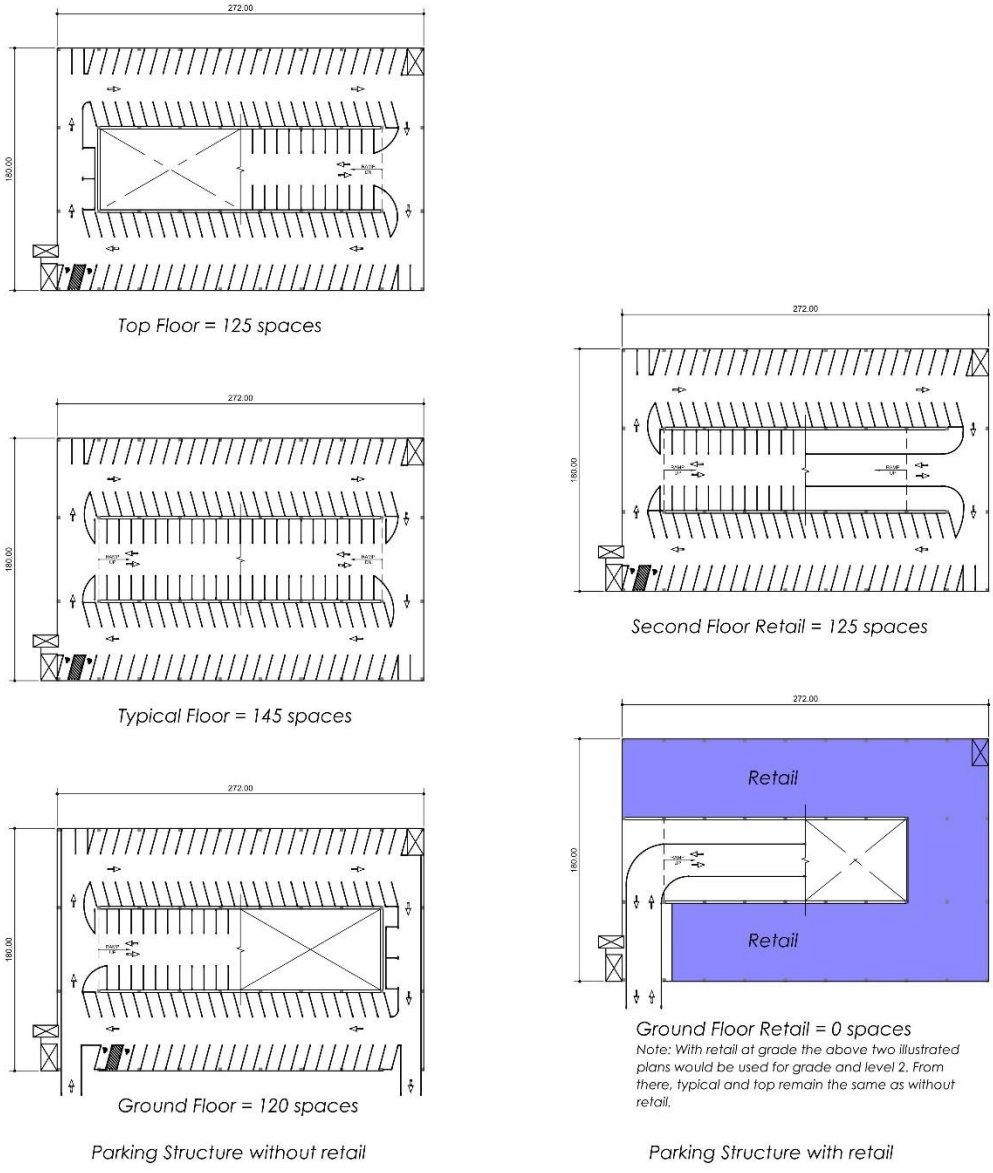
Cons:

- Requires the demolition of the Communities is Schools of South Central Texas building
- The City will need to purchase the property or enter into a public private agreement with the property owner

- A prime parcel of available land in the downtown area is no longer available
- The capacity of the existing lot needs to be added to the projected parking deficit/design capacity of the new garage.

The figure below shows the floor plans for both structure parking options.

Figure 30: Option 1/1A Structured Parking on Block 16



Source: Walker Parking Consultants, 2016

OPTION 2

Alternatively, Walker considered a smaller parking garage of the same footprint as Option 1. The overall structure will consist of two stories (ground plus one supported tier) and have a design capacity of approximately 245 spaces.

The estimated order-of-magnitude construction cost per-space is between $17,000 and $21,000, excluding the cost associated with land/building acquisition, environmental remediation that may or may not be needed, utility relocation costs, geotechnical engineering impacts, demolition costs, and other soft costs such as design or financing fees. Based on a 245-space facility, the total estimated construction cost is between $4,165,000 and $5,145,000.

The net space gain for Option 2 is 131 spaces. When compared to the construction cost, the net cost per space gained is between $31,794 and $39,275. There are several advantages and disadvantages associated with Option 2 including the following:

Pros:

- The garage is ideally located within a short walking distance to major demand generators
- The land parcel is of sufficient size to develop an efficient parking structure

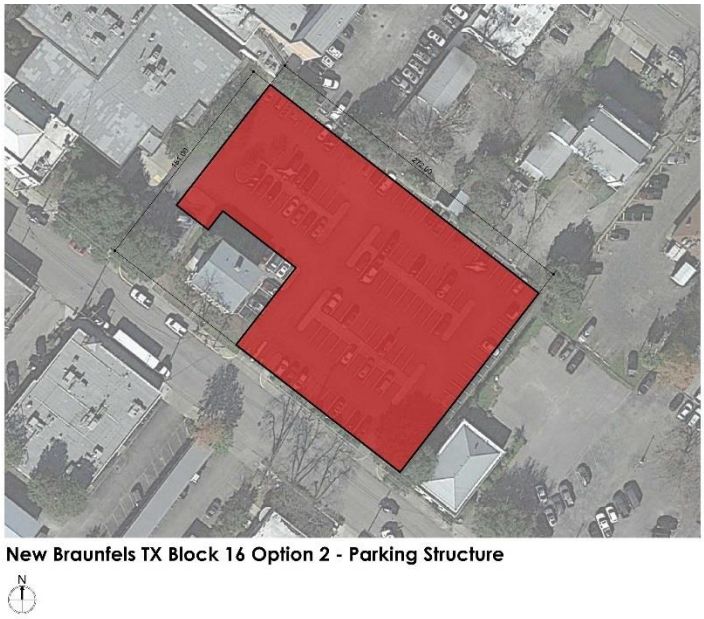
Cons:

- Requires the demolition of the Communities is Schools of South Central Texas building
- The City will need to purchase the property or enter into a public private agreement with the property owner
- A prime parcel of available land in the downtown area is no longer available
- The capacity of the existing lot needs to be added to the projected parking deficit/design capacity of the new garage
- The construction cost per net space gained is higher than Options 1 and 1A

OPTION 3

The following figure shows the general footprint of a third structured parking option on the same plot of land, however in this option, the existing historical building is left intact. The overall structure will consist of five levels (ground plus four supported tier) and have a design capacity of approximately 495 spaces.

Figure 31: Alternative Structured Parking on Block 16



Source: Google & Walker, 2016

The estimated order-of-magnitude construction cost per-space is between $21,000 and $25,000, excluding the cost associated with land/building acquisition, environmental remediation that may or may not be needed, utility relocation costs, geotechnical engineering impacts, demolition costs, and other soft costs such as design or financing fees. Based on a 495-space facility, the total estimated construction cost is between $10,395,000 and $12,375,000.

The net space gain for Option 2 is 381 spaces. When compared to the construction cost, the net cost per space gained is between $27,283 and $32,480. There are several advantages and disadvantages associated with Option 3 including the following:

Pros:

- The garage is ideally located within a short walking distance to major demand generators
- The Communities in Schools of South Central Texas building, an historic structure, is not demolished

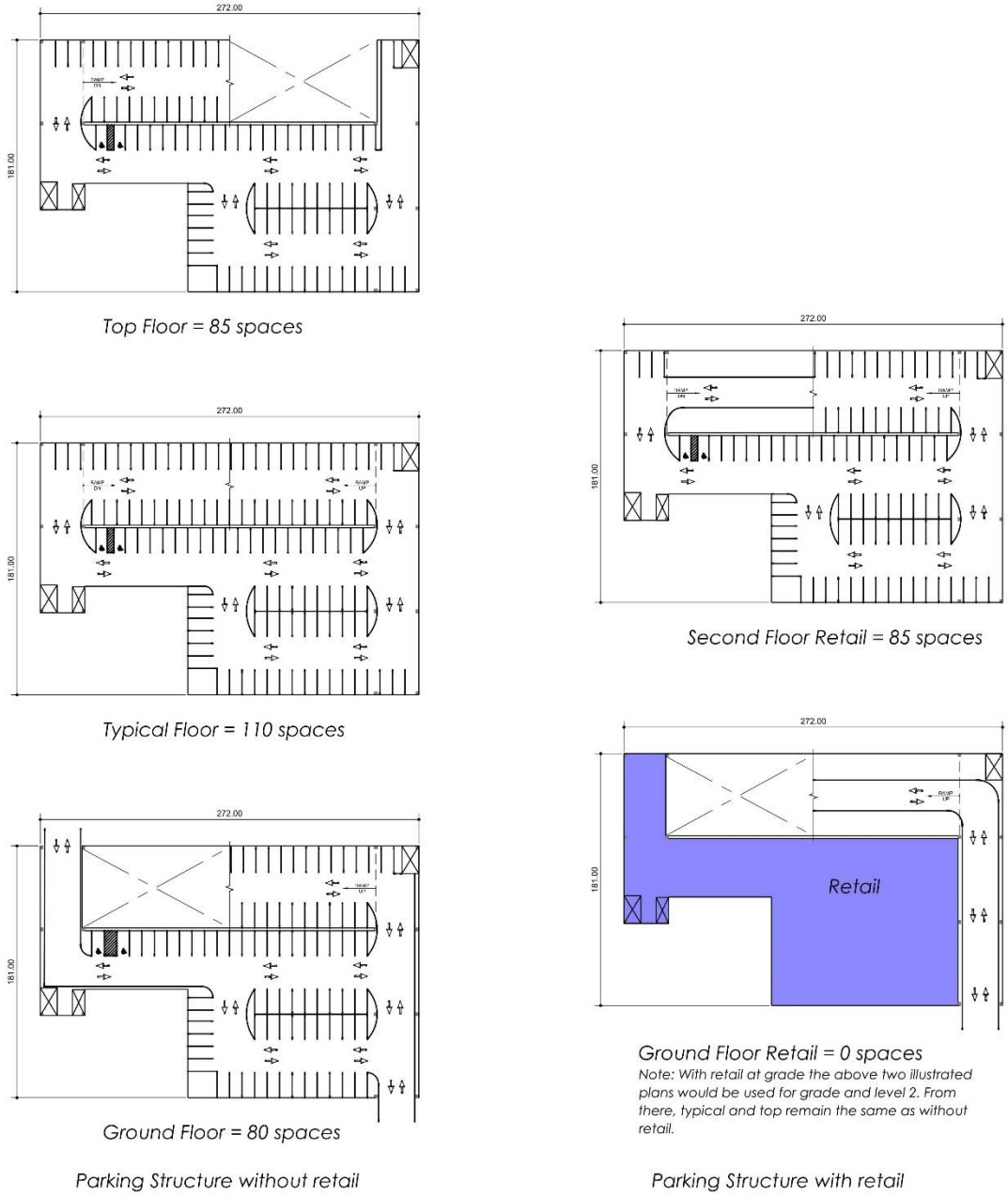
Cons:

- The efficiency of the garage is reduced due to the Communities in School structure remaining in place
- The parking structure will be approximately 55 feet tall, taller than most if not all of the buildings in the downtown
- The City will need to purchase the property or enter into a public private agreement with the property owner
- A prime parcel of available land in the downtown area is no longer available

- The capacity of the existing lot needs to be added to the projected parking deficit/design capacity of the new garage
- The construction cost per net space gained is higher than Options 1 and 1A

The figure below depicts the preliminary floor plans for Options 3 and 3A, where a structured parking solution is built around the existing historic building.

Figure 32: Option 3/3A Structured Parking on Block 16



Source: Walker Parking Consultants, 2016

OPTION 3A

As a modification to the third option, Walker considered a structure of the same footprint with retail located on the ground floor (Option 3A). However, due to the increased parking demand generated by the ground floor retail, we recommend a garage of approximately 525 spaces. The overall structure will consist of six levels (five levels of parking parking) and have a design capacity of approximately 500 spaces.

The estimated construction cost per-space is between $21,000 and $25,000, excluding the cost associated with land/building acquisition, environmental remediation that may or may not be needed, utility relocation costs, geotechnical engineering impacts, and demolition costs. Based on a 500-space facility, the total estimated construction cost is between $10,500,000 and $12,500,000.

The net space gain for Option 3A is 386 spaces. When compared to the construction cost, the net cost per space gained is between $27,202 and $32,383. There are several advantages and disadvantages associated with Option 3A including the following:

Pros:

- The garage is ideally located within a short walking distance to major demand generators
- The Communities in Schools of South Central Texas building, an historic structure, is not demolished
- Incorporates retail space on the ground floor to maintain a central business district look

Cons:

- The efficiency of the garage is reduced due to the Communities in School structure remaining in place
- The parking structure will be approximately 66 feet tall, taller than most if not all of the buildings in the downtown
- The City will need to purchase the property or enter into a public private agreement with the property owner
- A prime parcel of available land in the downtown area is no longer available
- The capacity of the existing lot needs to be added to the projected parking deficit/design capacity of the new garage
- The construction cost per net space gained is higher than Options 1 and 1A

OPTION 4

Walker also considered a fourth structure parking option on Block 16, where the garage would span both the Chase Bank lot site and the First Protestant Church lot. The following figure depicts the general location of the proposed Option 4 structure.

Figure 33: Alternative Structured Parking on Block 16

Source: Google & Walker, 2016

Similar to Option 1, the Option 4 garage is a three-bay, one-way traffic flow, single-threaded structure with a footprint of 180' by 272'. The overall structure could consist of 3.5 to 4 levels of parking, and provide between 460 and 535 parking spaces. (See Figure 30 for a preliminary floor plan.)

The estimated order-of-magnitude construction cost per-space is between $17,000 and $21,000, excluding the cost associated with land/building acquisition, environmental remediation that may or may not be needed, utility relocation costs, geotechnical engineering impacts, demolition costs, and other soft costs such as design or financing fees. Based on a 450-space facility, the total estimated construction cost is between $7,820,000 and $9,660,000.

There are several advantages and disadvantages associated with Option 4 including the following:

Pros:

- The garage is ideally located within a short walking distance to major demand generators
- The land parcel is of sufficient size to develop an efficient parking structure
- Does no require the demolition of the Communities is Schools of South Central Texas building

Cons:

- Requires the demolition of the building
- The City will need to purchase the property or enter into a public private agreement with the property owner

- A prime parcel of available land in the downtown area is no longer available
- The capacity of the existing lot needs to be added to the projected parking deficit/design capacity of the new garage.

RECONFIGURATION/RESTRIPING OPTION

Typically the quickest and least expensive way to increase parking supply is by maximizing the existing space through restriping. Costs of a parking structure can run anywhere from $15,000 to $20,000 per space and upwards. Surface parking lot construction costs typically range from $2,500 to $4,500 per space. By comparison, simple line restriping costs for an asphalt parking lot range from $21 to $35 per space depending on several variables including the number of coats of sealer used. Therefore, restriping a parking facility to increase capacity represents a substantial savings over building new parking facilities. How and why an existing lot is restriped is dependent on the situation. In some cases, stall widths can be reduced to 8'-6" to increase the parking supply. In other cases, drive aisles may be reduced; moreover, converting from 90-degree to angled parking or vice versa can result in increased capacity.

BLOCK 2 PUBLIC PARKING LOT

Comal County currently owns the parcel of land at the northeast corner of E. Bridge Street and N. Seguin Avenue where a 42-space public parking lot is located. Parkers can access the lot from E. Bridge Street, where there are two driveways – one-way in, one-way out (see figure below). The Lot abuts a vacant property also owned by the County. While the figure below shows a building, it has since been demolished. The parcels are currently separated by a curb and fence.

Our discussions with the City indicate this property may be developed by the County in the future, but the City is not aware of any official plans or timelines.

Figure 34: Street View of Block 2 Public Lot

Source: Google, 2016

The existing parking lot is approximately 120 feet wide by 190 feet long. Signage is located at the entrance and the corner of the block identifying the lot and public and "temporary." The recently demolished parcel of land adjacent to the lot is approximately 71 feet wide and 190 feet long. The existing lot is approximately 650 feet from the town center and between 1,400 and 1,700 feet from many of the restaurants on Blocks 8, 15, and 16. These distances equate to approximately a five to ten minute walk.

Walker considered two different restriping options for the public lot on Block 2. In the first option, we restriped the existing lot in order to gain 22 parking spaces. The entry/exist was also reconfigured. The cost to restripe and modify the existing curb cuts is estimated at $2,585[3].

There are several advantages and disadvantages associated with restriping this lot including the following:

Pros:

- There are no capital costs associated with purchasing the property
- Minimal construction is required to restripe/reconfigure the existing lot
- Improves efficiency of the parcel
- There is minimal cost per net space gained

Cons:

- The County owns the property, not the City, and thus must consent to the modifications
- While not a long walk, the lot is located furthest from many of the prime destinations in the downtown area

[3] 63 spaces at $35 per space to restripe and approximately 45 linear feet of curb work at $8 per linear foot.

Figure 35: Reconfiguration of Block 2 – Option 1

Source: Google, 2016

As an alternate option, the existing lot was expanded onto the vacant lot. A three-bay parking lot with 90° angled parking can be built. The three bay option increases the capacity by 50 spaces, from 41 stalls to 91 stalls. Expanding the surface lot would require some demolition work to remove existing curbs, as well as resurfacing the vacant lot. The cost to restripe, expand the surface lot, and modify the existing curb cuts is estimated at $128,585[4].

There are several advantages and disadvantages associated with restriping this lot including the following:

Pros:

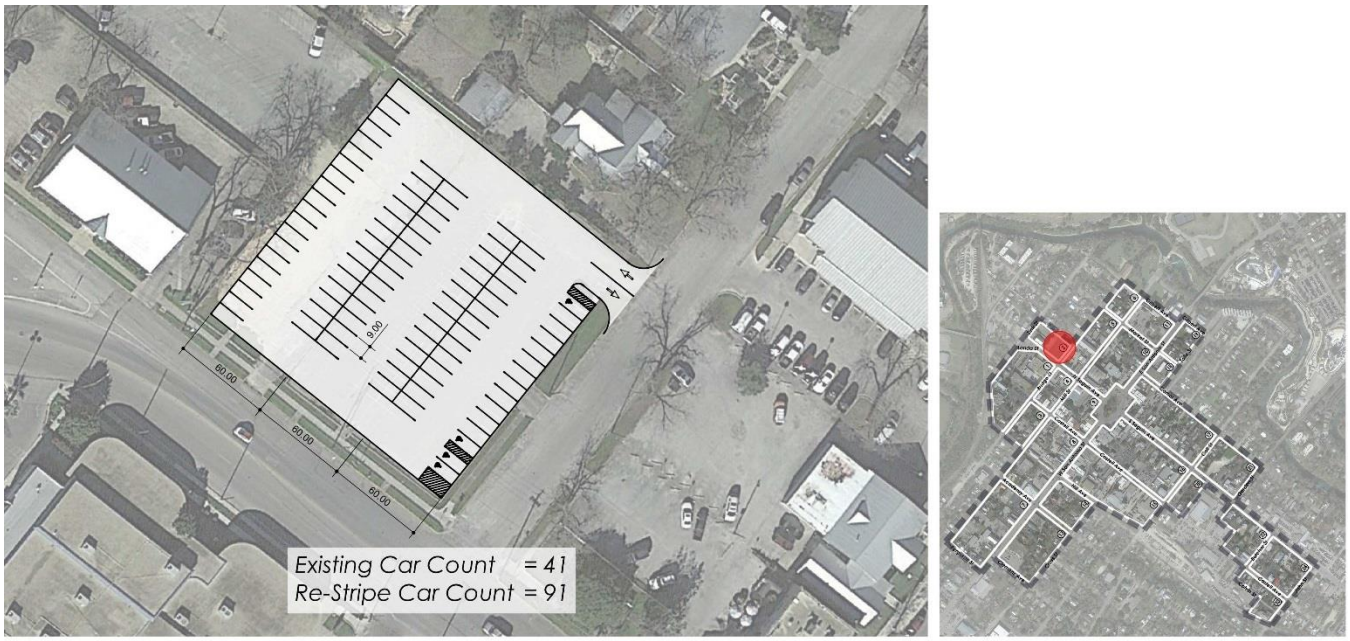
- There are no capital costs associated with purchasing the property as the County owns both the existing lot and the vacant property
- Minimal construction is required to restripe/reconfigure/expand the existing lot
- Improves efficiency of the parcel
- There is minimal cost per net space gained

Cons:

- The County owns the property, not the City, and thus must consent to the modifications
- While not a long walk, the lot is located furthest from many of the prime destinations in the downtown area

[4] Construction of approximately 28 spaces at $4,500 per space, 63 spaces at $35 per space to restripe and approximately 45 linear feet of curb work at $8 per linear foot.

Figure 36: Reconfiguration/Expansion of Block 2 – Option 2



Source: Google, 2016

BLOCK 4 PUBLIC PARKING LOT

The 22-space public parking lot on Block 4 is part of a larger surface lot owned by the County. There are three semi-segregated parking areas reserved for County tax office employees and visitors in addition to the single bay of "public" parking. The public portion of the lot can be accesses from W. Bridge Street. The private portions of the garage can be access from both Bridge Street and Mill Street and are semi connected. It is important to note that the private reserved sections were observed as occupied in the evenings and on weekends suggesting that informal shared parking is already occurring on this parcel. Signage is posted at all the entrances and in parking spaces identifying parking restrictions, as shown in the pictures below.

Figure 37: Street View of Block 4 Public/Private Lot

Source: Google, 2016

The overall property is L-shaped, with an area of approximately 27,280 square feet. While the "public" portion of the lot is approximately 138 feet long by 60 feet wide, the total parking area on Block 4 is 190 feet wide by 205 feet wide.

Walker recommends restriping the lot as one contiguous parking surface to increase efficiency and improve circulation through the lot. We understand that there are reserved areas within the existing lot that will need to remain reserved for specific parkers. These reserved spaces can be maintained through signage, preferably posted in front of the parking stall, similar to how they are today. Additionally, as the private/reserved spaces are likely being used by the public during non-County business hours, a more formal arrangement could be posted at the lot entrance and/or above the reserved spaces. While residents and regular visitors are likely aware of this informal shared arrangement, first time visitors may be uncertain and view the parking as unavailable.

While reconfiguring the public/private lot on Block 4 only results in a net gain of 4 parking spaces, as shown in the following figure, circulation through the lot is significantly improved. The cost to restripe the lot is estimated at $2,730[5].

There are several advantages and disadvantages associated with restriping this lot including the following:

Pros:

- There are no capital costs associated with purchasing the property as the County owns the existing lot
- Minimal construction is required to restripe/reconfigure the existing lot

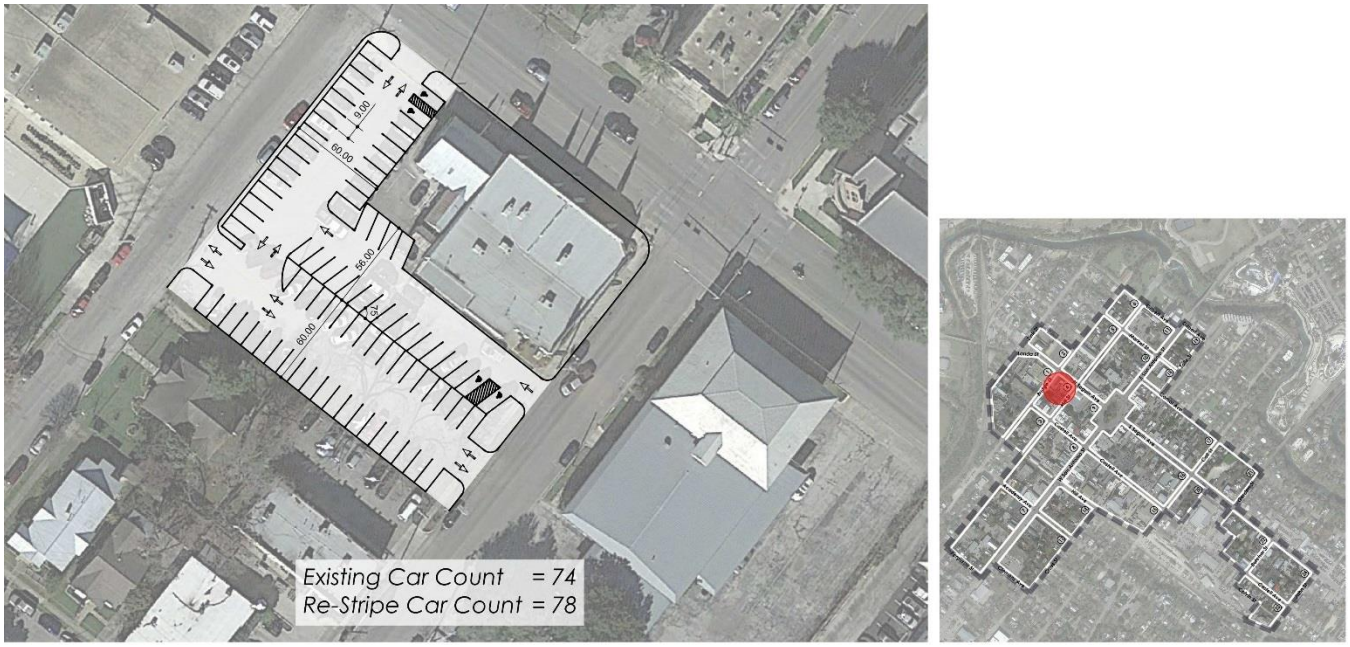
[5] 78 spaces at $35 per space to restripe

- Improves efficiency of the parcel
- The property is located within

Cons:

- The County owns the property, not the City, and thus must consent to the modifications
- While not a long walk, the lot is located furthest from many of the prime destinations in the downtown area

Figure 38: Reconfiguration of Block 4



Source: Google, 2016

BLOCK 15 COOP PARKING LOT

Based on comments from the City and various stakeholders, Walker also considered the potential for expanded parking on Block 15. The existing Coop parking lot is a private, unstriped parcel of land next to a warehouse building. The parking lot is the home of the animal feed and car cooperative and operates Monday through Saturday, 7:30 am until 5:30 pm (1 pm on Saturday), as shown in the figure below.

Figure 39: Coop Parking Lot Street View

Source: Walker Parking Consultants, 2016

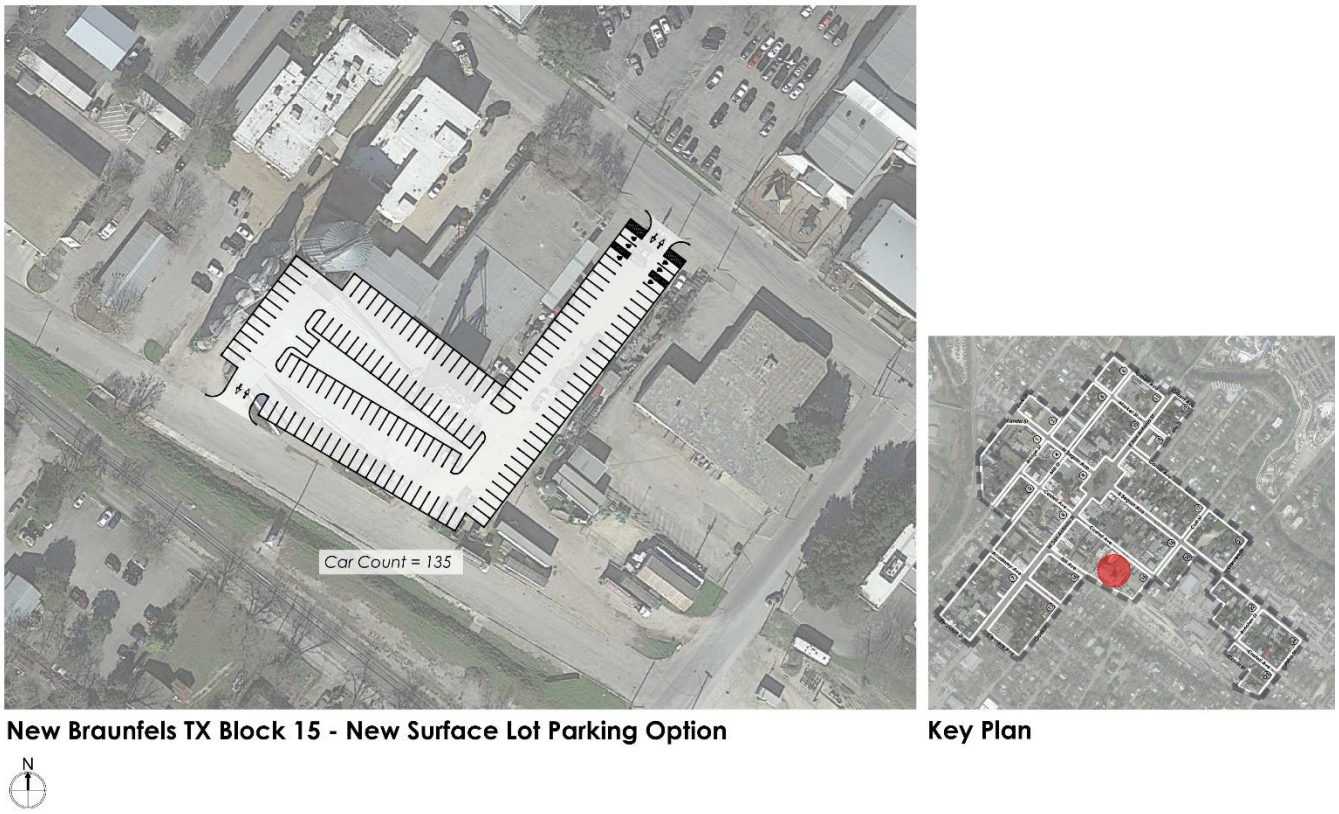
The existing lot is a small strip of land approximately 60 feet wide and 300 feet long. However, if purchased by the City for public parking, a portion of the existing warehouse building would be demolished, as shown in the figure below.

Figure 40: Coop Parking Lot Street View

Source: Google, 2016

The demolition of this portion of the structure would allow for the construction of a 135 space surface lot on the property, increasing the available parking capacity on Block 15.

Figure 41: Reconfiguration of Block 4



Source: Walker & Google, 2016

Walker cannot comment on the demolition costs and land acquisition costs associated with this option. However, the cost to resurface and restripe the lot is estimated at $373,725[6], or approximately $2,768 per space.

There are several advantages and disadvantages associated with restriping this lot including the following:

Pros:

- The surface is ideally located, increasing the available parking supply within a short walking distance to major demand generators
- Improved configuration which promotes better vehicle and pedestrian circulation, increased capacity, and other functional and aesthetic improvements to this area.

Cons:

- Requires the demolition of a portion of the warehouse building

[6] 135 spaces at $35 per space to restripe, plus construction of approximately 82 spaces at a cost of $4,500 per space. Walker assumed the existing surface lot is already surfaced and just needs striping.

- The City will need to purchase the property or enter into a public private agreement with the property owner
- The capacity of the existing lot needs to be added to the projected parking deficit/design capacity of the new garage

MATRIX OF THE ANALYSIS

To help prioritize the criteria to consider when judging the various sites, we use a matrix analysis. As agreed upon with the City, we list all the criteria that we want to consider during the evaluation process and assign each a weight (i.e. importance). The alternative's score for the criteria is the weight multiplied by the rating. The summation of scores gives us a final number such that theoretically the highest number is the most preferred scheme and the lowest number is the least preferred. Small variations in the totals can be ignored. The City should review the weights and ratings because it could easily affect the final recommendation.

Proximity to Demand – The location of each potential development site in relation to commercial buildings that are occupied and generate demand for parking during traditional business hours. The representation of land use near each site is considered and the level of reliance a site may have on one or multiple sources of demand.

Construction Cost – The construction cost associated with each potential development site does not include things such as property acquisition, tenant relocation, and demolition.

Cost per Net Space Gained – The cost associated with building an additional parking space.

Land Availability – The land availability associated with each potential development site considers the existing use of the land, whether or not property acquisition is required, and the need for tenant relocation, zoning compliance, and whether or not identified redevelopment plans exist.

Future Development – The assessment of future development includes whether parking is the highest and best use of the land and if future development is planned on or adjacent to the site that may benefit or hinder the parking operation.

Traffic Impact – The traffic impact on the existing traffic patterns and the impact that peak period loading and unloading may have on the surrounding street system.

Mixed-Use Potential – The potential of each site to integrate at grade level retail, restaurant and/or office space. Whether or not potential for a mixed-use parking facility exists is dependent on the type of land uses that surround the site and the existing market conditions for each type.

Increased Capacity of System – Does the new garage or expansion eliminate existing public parking? Can the displaced parking be absorbed back into the garage's capacity?

Aesthetic Value – The structure will need to blend in with the buildings adjacent to it. What kind of façade will be needed?

Temporary Displacement of Close-In Parking – A new garage or the expansion of an existing facility may require the exiting lot or a part of the existing parking be shut down for a period of time. How disruptive will this be to the current parking situation?

Site Wayfinding – The ability of a driver or pedestrian to locate the parking facility. Many of these sites already contain public or private parking. Is the site already easily located? Can signage be added to the downtown area to aid drivers in locating parking?

Table 39: Alternatives Matrix

CRITERIA		Option 1 Parking Structure Block 16		Option 1A Parking Structure w/ Retail Block 16		Option 2 One Supported Level Parking Structure		Option 3 Parking Structure Block 16		Option 3A Parking Structure w/ Retail Block 16		Option 4 Parking Structure Block 16		Two-Bay Parking Lot Block 2		Three-Bay Parking Lot Block 2		Reconfigured Parking Lot Block 4		Demolition and Reconfiguration of Coop Lot Block 15	
	Weight	Rating	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score	Rating	Score
Proximity to Demand	5	5	25	5	25	5	25	5	25	5	25	5	25	2	10	2	10	3	15	4	20
Construction Cost	4	1	4	1	4	1	4	1	4	1	4	1	4	5	20	4	16	5	20	2	8
Cost Per Net Space Gained	3	2	6	2	6	1	3	1	3	1	3	2	6	5	15	3	9	4	12	3	9
Demolition	3	2	6	2	6	2	6	4	12	4	12	2	6	5	15	5	15	5	15	1	3
Land Availability	4	2	8	2	8	2	8	3	12	3	12	1	4	4	16	5	20	5	20	2	8
Future Development	3	2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	4	12	3	9
Traffic Impact	3	2	6	2	6	2	6	2	6	2	6	2	6	5	15	5	15	5	15	4	12
Mixed-Use Potential	3	1	3	5	15	1	3	1	3	5	15	1	3	1	3	1	3	1	3	1	3
Increased Capacity of System	5	5	25	5	25	4	20	5	25	5	25	5	25	3	15	3	15	1	5	4	20
Aesthetic Value	2	4	8	5	10	4	8	4	8	5	10	4	8	1	2	1	2	1	2	1	2
Temporary Displacement of Close-In Parking	3	1	3	1	3	1	3	1	3	1	3	1	3	5	15	5	15	5	15	5	15
Site Wayfinding	3	4	12	4	12	4	12	4	12	4	12	4	12	2	6	2	6	3	9	4	12
Expansion Opportunity	2	2	4	2	4	2	4	2	4	2	4	2	4	4	8	4	8	1	2	4	8
Total			116		130		108		123		137		112		146		140		145		129
Rating: 5 = Most Important, Best 1 = Less																					

Source: Walker Parking Consultants, 2016

The final determination of the relative attractiveness of the alternative solutions must rest with the City of New Braunfels. However, this site analysis provides a reasonable and supportable look at the criteria upon which to base such a decision. Based on this analysis, restriping the lot on Block 2 and reconfiguring the parking on Block 4 were identified to be the highest-ranking solutions. The Three bay Lot on Block 2 and the Option 3A parking structure were the next highest-ranking options.

Before moving forward with a structured solution and increasing the downtown parking supply by 300+ spaces, we recommend re-evaluating parking demand during the peak season. Walker's analysis accounted for typical seasonal adjustment factors, based on ULI recommended presence factors for several land uses in the downtown. New Braunfels is purported to experience a large influx of tourists during peak season that may out-pace ULI recommendations. Additionally, Walker's projections for the future land uses are based on ULI recommended parking ratios and are higher than our observations; these projections should be re-evaluated when the peak season parking demand is observed, as a smaller parking garage may be in order.

SHARING OF LOTS

While there are opportunities to develop structured parking or increase existing parking through restriping, there are many existing spaces in private lots in the downtown area that are vacant for large portions of the day. The single best improvement New Braunfels could make would be to continue to create agreements to share underutilized parking lots between their private owners and the public. There are several reasons why this is such a beneficial approach:

- From an environmental perspective, it is always preferable to make good use of existing parking resources before building additional ones.
- From an aesthetic perspective, adding to the existing checkerboard of surface lots is not desirable and a garage, which would consolidate parking and reduce the surface area devoted to parking, is usually an expensive option and may not be warranted yet.
- From a customer service perspective, the current arrangement is unwelcoming. It's one thing to have some private lots that a customer can't use, but also have signage directing a newcomer to a public parking area. In New Braunfels a newcomer passes lot after lot that they cannot use. And if they are going to a store with a lot, they may feel compelled to move their car somewhere else when they want to walk around.
- From a financial perspective, owners may be relieved of some insurance and other operating costs while the City gets parking without spending the large amount of money needed for a garage.

Several municipalities across the country utilize shared parking, including Cary, NC; Del Ray, FL; San Diego, CA; and the City of San Clemente, CA.

There are already official and unofficial versions of shared parking in New Braunfels. The City currently advertises public parking spaces in the First Protestant Church lot on Block 16 and in the Fire Station lot on Block 15. This may be happening to some degree at other privately-owned lots with surplus parking. Some are lots marked expressly for a given use, but customers are never booted or towed for using these areas. In other cases, lots are divided between spaces marked for the businesses on that site and unmarked or "customer only" spaces that can (informally) be used by anyone despite being associated with a particular building. This is an informal approach to providing more public parking, and one that requires little on the part of the owner. The downside of such an approach is that if the lot is not "advertised" as public, it remains ambiguous and many visitors will avoid using it. Many will drive cars from lot to lot rather than walk around because they aren't sure whether they will be towed. Basically, the current sharing arrangement is only useful for frequent visitors.

A more thorough approach is to make formal agreements to allow public parking on private lots, and direct cars to these areas. Spaces can be reserved as needed within the lot for the on-site uses, essentially limiting the public parking and guaranteeing that businesses don't lose their valuable resource. This sends a clearer message to the public that they can use the lot, but it does so without jeopardizing on-site tenants.

In addition to the concern about ensuring that tenants still have spaces, there is a concern about the liability associated with having the general public parking on private lots. Some cities lease the lots from the private owners, which makes the leaseholder liable; the leaseholder carries the insurance for public parking in the lot, as well as paying other expenses such as lighting, cleaning, etc.

Given the low occupancy in some of the surface lots throughout the day, but especially later in the day, evening shared use should be strongly considered even where lot owners are reluctant to allow overflow onto underutilized portions of their lots during their busy daytime hours. Again, a limitation of liability will be important.

Based on our supply and demand analysis, there are several lots within the Study Area with excess parking supply, including those pictured below.

Figure 42: Potential Shared Parking Locations

Source: Walker Parking Consultants, 2016

The following table shows the available parking throughout the day during both weekday and weekend conditions in several lots in the downtown.

Table 40: Available Parking Supply in Select Lots

	Block	Lot Name	Inventory	10:00 AM	12:00 PM	2:00 PM	5:30 PM	7:00 PM	Max	Surplus/ Deficit
Weekday	5	City Hall/Liberty Bistro	91	49	42	46	34	30	49	42
	7	First United Methodist Church	238	54	39	48	27	89	89	149
	13	Arlan's Market	80	19	22	22	17	13	22	58
	16	Chase Bank/Communities in Schools	114	47	55	55	22	37	55	59
	16	First Protestant Church	67	23	22	22	22	14	23	44
	16	First Protestant Church	44	23	22	22	22	14	23	21
	20	First Protestant Church	86	20	23	27	11	3	27	59
		Total	**720**	**235**	**225**	**242**	**155**	**200**	**288**	**432**

	Block	Lot Name	Inventory	10:00 AM	12:00 PM	3:00 PM	6:00 PM	8:00 PM	Max	Surplus/ Deficit
Weekend	5	City Hall/Liberty Bistro	91	9	17	19	31	33	33	58
	7	First United Methodist Church	238	8	3	3	38	45	45	193
	13	Arlan's Market	80	21	17	28	17	5	28	52
	16	Chase Bank/Communities in Schools	114	52	96	23	20	41	96	18
	16	First Protestant Church	67	31	48	6	13	13	48	19
	16	First Protestant Church	44	12	13	22	15	27	27	17
	20	First Protestant Church	86	2	2	2	2	2	2	84
		Total	**720**	**135**	**196**	**103**	**136**	**166**	**279**	**441**

Source: Walker Parking Consultants, 2016

Although the availability may vary throughout the year, there are potentially 400 or more vacant spaces within 400 to 1,200 feet (a five to ten minute walk) of the busiest sections of San Antonio Street and Castell Ave. Please note, Walker included the First Protestant Church lot currently advertised as public parking.

We recommend, at a minimum, the City consider entering a formal agreement with the First United Methodist Church on Block 7 to utilize a portion of their 238 space lot. Walker observed 150+ vacant spaces in that lot during our study. Additionally, the lot is located within half a block of the redevelopment project on Block 8, and could serve to supplement their onsite parking supply.

Sample agreements between a City and a private lot owner, and for valet parking, are provided in the Appendix.

PRELIMINARY FINANCIAL ANALYSIS

WALKER
PARKING CONSULTANTS

PRELIMINARY FINANCIAL ANALYSIS

Because of the significant cost that runs in the millions of dollars, most decision makers view a parking structure as a last resort when compared to other options such as parking lot expansion, restriping, and reconfiguration; the usage of remote parking and shuttles; and improved parking management techniques that facilitate better usage of existing spaces. The decision to fund a parking structure is not an easy decision because it's one of equity. Who should pay for the garage? What is fair?

Parking structures are funded in a variety of ways. Some cities have relied exclusively on user fees from single facilities, other cities have pooled net income from a wider parking operation, taking revenues from parking meters, parking citations income, and other off-street parking facilities; general funds have been tapped to fund parking; and ad valorem taxes have been applied to all property owners or property owners located within the boundaries of a specified and legal business improvement district. There are other approaches; these are a few of the more common approaches.

In the case of New Braunfels, we do not believe at this time, that a parking structure could be funded through user fees because a paid parking market is nonexistent. There are no parking meters and off-street parking is provided at no charge to users. Therefore, funding options would most likely include an ad valorem property tax for a business district or use of the city's general fund. The issue here becomes a matter of equity. Who should pay for the garage? Users will not likely pay for it. Should all or some of the downtown merchants pay for it? Or, should all property owners residing within the city limits pay for it?

To inform a decision about a parking structure, the following analysis documents anticipated upfront capital costs, ongoing capital expenditures associated with long-term maintenance, operating expenses, and operating revenues. The analysis shows that the costs exceed the revenue potential.

PROBABLE COSTS OF BUILDING A PARKING STRUCTURE

Our opinion of probable construction costs for a ±460-space, 3.5-level parking structure to be located on Block 16, on the existing 114-space private parking lot behind the Chase Bank, is $8.3 million. This conceptual construction cost figure is a hard cost number only and does not include site preparation costs, demolition, off-site infrastructure improvements, construction contingency, financing costs, or some other soft costs. These items are accounted for in soft costs, which are estimated at 20% of hard costs. Adding the 20% soft costs pushes the total project cost from $8.3 to $10 million.

The costs included herein assume a freestanding parking structure built using long-span construction, a simple façade consisting of precast architectural panels, and overall modest architectural treatments. Excluded is land acquisition costs.

PROJECTED DEBT SERVICE PAYMENT

The debt service payment for a proposed parking facility considers three variables – principal, interest rate, and term. To determine the principal amount, land acquisition costs (if any), the cost of construction, a construction contingency, architectural and engineering fees, and financing costs are included in the total principal amount (assuming 100 percent financing).

Since few parking projects are paid for in cash, the cost of financing becomes an important factor. Some publicly-financed parking projects are financed at fixed interest rates with little or no equity. The interest rate is determined by the debtor's credit history, the amount of collateral, and sometimes the amount of insurance purchased to secure the loan. The customary term for most loans is 20 to 25 years and no longer than 30 years.

This analysis assumes that a $10 million parking structure would be financed at a tax-exempt rate of 3.5% per annum for 25 years. The resultant annual debt service payment is therefore estimated at $607,000 annually (rounded).

Table 41: Debt Service Assumptions

Proposed parking structure		460	spaces
Construction cost per space		$ 18,000.00	/space
Construction costs		$ 8,280,000	
+ Soft costs	20%	1,656,000	
= Total project costs		$ 9,936,000	$10 million rounded
Downpayment		$ -	
Annual interest rate		3.50%	tax-exempt
Term		25	years
Annual debt service		($606,740.35)	$607,000 rounded

Source: Walker Parking Consultants, 2016

TYPICAL OPERATING EXPENSES

Operating expenses of parking facilities can vary dramatically. Variations are due to geographical location, size of facility, staffing patterns, method of operation, and local legal requirements. These expenses include the cost of utilities, supplies, daily maintenance, cashiering, management and accounting services, on-site security, structural maintenance, and insurance. Types of insurance coverage include comprehensive liability, garage keeper's legal liability, fire and extended coverage, workers' compensation, equipment coverage, money and security coverage (theft occurring on the premises), blanket honesty coverage (employee theft), and rent and business interruption coverage (structural damage resulting from natural phenomena). Annual operating expenses for structured parking facilities typically

range from $300 to more than $800 per space. These figures exclude parking, property, and sales taxes. Depreciation is also not included, as this is not a cash operating expense; however, a reserve for structural maintenance or replacements is recommended. Debt service is not included in these figures, as it is not considered an operating expense.

This analysis assumes that any revenue collected at a parking structure in New Braunfels would be automated and not rely on staffed exit cashiering. This helps control operating costs significantly. For a potential 460-space parking structure located on the Chase Bank site, this analysis assumes operating expenses

Table 42: Operating Expense Assumptions

Annual operating expenses	Per space		
Wages & Benefits	$100.00	$46,000	
Management Costs	$40.00	$18,400	
Security Costs	$0.00	$0	
Utilities	$75.00	$34,500	
Insurance	$30.00	$13,800	
Supplies	$10.00	$4,600	
Routine Maintenance	$40.00	$18,400	
Other	$25.00	$11,500	
Total	$320.00	$147,200	$150,000 rounded
Structural Maintenance (Reserve)	$75.00	$34,500	/year

Source: Walker Parking Consultants, 2016

As shown above, it will cost a minimum of $150,000 annually to operate a 460-space parking structure.

STRUCTURAL MAINTENANCE RESERVE

In addition to operating expenses, Walker highly recommends that funds be set-aside on a regular basis to cover structural maintenance costs. We suggest that a minimum of $75.00 per structured space annually be placed in a sinking fund and that this amount be adjusted annually for inflationary expenses. Once a sinking fund is established, contributions to this fund accumulate over time and are available to cover structural maintenance and structural repairs. Even the best-designed and constructed parking facility requires structural maintenance. For example, expansion joints need to be replaced and concrete invariably deteriorates over time and needs to be repaired to ensure safety and to prevent further deterioration. The structural maintenance cost typically represents the largest portion of the total maintenance budget. Facility owners tend to grossly underestimate the structural maintenance cost and budget inadequately for timely corrective actions that must be performed to cost-effectively extend the service life of the facility. Also, the adverse impact of ineffective structure maintenance is

deferred. Therefore, it is difficult for most owners to recognize or realize the long-term benefits of timely corrective and preventive maintenance actions. The cost of structure maintenance is relatively small considering the potential liability associated with the neglect to properly maintain the facility.

The age and the geographic location of a parking facility also impact maintenance costs. Older facilities require more maintenance than a new facility. The cost of maintaining the structure will also increase as the structure ages. A structure located in a moderate climatic region is likely to require less maintenance than a structure located in the northern climatic region, which is subjected to harsher exposure conditions.

Additionally, the structural system of the parking facility will influence maintenance costs. However, it is important to realize that the true cost over the life of the structure consists of two components – the initial cost to construct the facility, and the maintenance cost. Structural systems that initially cost less may eventually turn out to be more expensive considering the higher cost of maintaining the structure over the entire service life of the facility.

The periodic structural maintenance includes items such as patching concrete spalls and delaminations in floor slabs, beams, columns, walls, etc. In many instances there are maintenance costs associated with the topping membranes, the routing and sealing of joints and cracks, and the expansion/construction joint repairs. The cost of these repairs can vary significantly from one structure to another. The factors that will impact the maintenance cost include, but are not limited to, the value the owner places on the maintenance of the facility, the local climate, and the age of the structure.

A review by a restoration specialist is usually necessary to identify the preventive maintenance needs of a facility. In addition to the annual or other periodic inspections, material testing and examinations may also be necessary to determine and recommend maintenance measures. The results of the periodic inspections may also indicate the need for other material examinations and laboratory testing.

Note that the recommended repair and maintenance fund is often considered a capital expense and is not included as an operating expense for a parking facility.

REVENUE ANALYSIS

This section discusses the revenue potential of the garage based on an assumption that significant numbers of users would use the facility and willingly pay the parking rates instead of seeking out free parking spaces elsewhere. These projections are based on the assumptions that sufficient demand will exist in the area due to identified and known future development projects. We remain unconvinced that there is a paid parking market in New Braunfels and therefore the revenues shown herein may be nothing more than theoretical and unachievable.

On a preliminary basis, Walker assumed that approximately 100 of the spaces in the proposed structure would be occupied by monthly parkers. Additionally, we assumed the city would charge $40 per space per month.

Walker also projected transient parking revenue for the potential parking structure. We assumed the garage would charge approximately $1.00 per hour, with a daily maximum of $5. Additionally, we assumed the garage would be reasonably well utilized during both weekday and weekend conditions. It is important to note however that at this time, parking occupancy rates and demand projection in the downtown area do not suggest the garage would experience parking volumes in the magnitude projected.

Based on the suggested rates and occupancy figures, we estimate that assuming identified future development projects would come to fruition and that significant numbers of users would pay to use the garage, the garage could in theory, generate approximately $754 per space annually, or $63 per space per month, as shown in the following figure. The city would need to charge significantly more per space in order to cover its expenses.

Table 43: Operating Revenue Assumptions

Transient Revenue	Available Spaces	Avg. Daily Demand	Days / Year	Rate / Car	Annual Revenue	Annual Cars
Weekday	460					
< 1/2 hour		30	250	$ 1.00	$ 7,500	7,500
> 1/2 to 1 hour		60	250	1.00	15,000	15,000
> 1 to 2 hours		108	250	2.00	54,000	27,000
> 2 to 12 hours		150	250	3.00	112,500	37,500
> 12 to 24 hours		12	250	5.00	15,000	3,000
Early Bird (In Before 10:00 AM)		30	250	2.00	15,000	7,500
Sub-total - Weekday Revenue		390			$ 219,000	97,500
Weekend	460					
< 1/2 hour		54	100	$ 1.00	$ 5,400	5,400
> 1/2 to 1 hour		60	100	1.00	6,000	6,000
> 1 to 2 hours		72	100	2.00	14,400	7,200
> 2 to 12 hours		120	100	3.00	36,000	12,000
> 12 to 24 hours		36	100	5.00	18,000	3,600
Early Bird (In Before 10:00 AM)		0	100	2.00	-	0
Sub-total - Weekend Revenue					$ 79,800	34,200
Sub - total - Transient Revenue					$ 298,800	131,700
Monthly Contract - Parking Revenue		Monthly Contracts	Months / Year			
General Monthly Contracts		100	12	40	48,000	25,000
Subtotal - Monthly Contract Revenue		100			$ 48,000	
Total - Parking Structure Revenue					$ 347,000	156,700
		Per Space - Annually			$ 754	
		Per Space - Monthly			$63	
Total Potential Gross Revenue Before Adjustment					$ 347,000	
Less Collection & Vacancy Loss (1%)					3,470	
Less CC Processing Fees					2,000	
Total Effective Gross Revenue (EGR)					$ 341,530	

Source: Walker Parking Consultants, 2016

PRO FORMA OPERATING STATEMENT

A pro forma operating statement has been prepared to demonstrate how parking revenues might compare to operating expenses, capital expenditures, and debt services. The following table shows that expenses would significantly exceed theoretical revenues.

Table 44: Net Operating Income and Debt Service Coverage

	Year 1	Year 5	Year 10	Year 20
Total Effective Gross Revenue	$ 341,530	$ 384,395	$ 445,619	$ 598,875
- Operating Expenses	(150,000)	(162,365)	(179,264)	(218,522)
= Net Operating Income	$ 191,530	$ 222,030	$ 266,355	$ 380,353
Debt Service	($607,000)	($607,000)	($607,000)	($607,000)
Debt Service Coverage Ratio	0.32	0.37	0.44	0.63

Source: Walker Parking Consultants, 2016

DEBT SERVICE COVERAGE RATIO

A debt service coverage ratio is a projected measure of solvency. The debt service coverage ratio is computed by dividing net operating income (operating revenues less operating expenses) by the required annual debt service payment (debt service is not defined as an operating expense). The debt service coverage ratio is intended to represent the parking facility's ability to meet its debt obligations. Generally speaking, in comparison to projects with low debt service coverage ratios, projects exhibiting comparatively high ratios suggest that these operations have a greater ability to weather changes in the market or any other unforeseeable financial obstacles. A projected debt service coverage ratio of less than 1.00 means that net operating income is projected to be insufficient to meet the debt service payments. Prior to underwriting a project, an underwriter requires that parking revenue projections for any given year cover debt service by at least 1.25 times and as high as 2.00 or more times.

As shown, a parking structure would not generate revenue sufficient to cover operating expenses and debt service.

FINANCING OPTIONS

Most structured parking facilities are not self-supporting. By this, we mean that operating revenues are often insufficient to cover operating expenses and debt service. Because of this reality, it is often not possible for an owner to obtain 100 percent financing on their parking project without subsidies of some kind. There are a number of proven strategies that have been successfully used to fund parking facility capital projects. Approaches used to finance parking projects include federal and/or state grants, tax-increment financing, taxes from business improvement districts or parking tax districts, and net revenues from other facilities or parking assets, including meters and/or parking citations income.

FEDERAL AND STATE GRANTS

Location, intended use of the facility, and availability of grant money are the variables that typically govern whether a project receives grant money. In summary, without a multi-modal transportation element, such as a bus transfer station, a rail or commuter rail station, etc. federal funds are very difficult to obtain for purposes of funding either a portion or an entire parking facility project. Therefore, based on Walker's previous research, most parking structures are not funded through the use of state and federal grant monies. This includes programs such as the FTA Capital Inventment Grants (New Starts), USDOT; FTA Formula Grants (USDOT); Surface Transportation Program (USDOT); TIGER Grants (USDOT); USDA Programs; and State of Texas programs.

OTHER OPTIONS THAT EXCLUDE GRANT FUNDING

Commonly used strategies for financing parking facilities, not related to federal or state grants or special loan programs include the following:

- Tax-Increment Financing
- Conventional Debt Financing
- General Obligation Bonds
- Revenue Bonds
- Business Improvement Districts
- Parking Tax Districts
- Payment in Lieu
- Development and Lease Agreements
- Creation of an Auxiliary Enterprise Fund
- Creation of a Parking Authority

TAX INCREMENT FINANCING

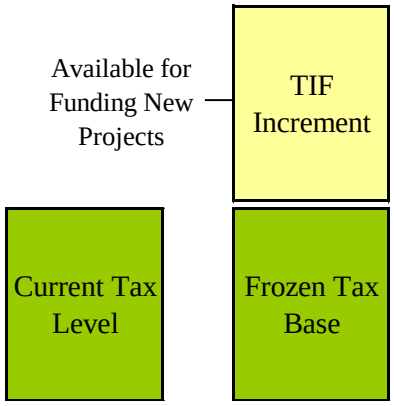
New Braunfels could utilize Tax Increment Financing to pay for the development of a new garage and other downtown public developments by creating a downtown Tax Increment Financing (TIF or TIRZ) district to take out bonds leveraged by the growth in property tax revenue within the district that occurs after improvements, such as the courthouse parking structure, are in place.

TIF districts are a common financing mechanism employed by municipalities that use tax revenue growth produced by an increase in the tax base of a specified area to repay the costs of investing in the area. While many cities rely on general tax revenue to fund improvements, tax increment financing is an increasingly viable solution to funding the development of needed infrastructure, including structured parking. TIF legislation enables a local government to finance redevelopment projects through an anticipated increase in the area's property tax revenues. TIF districts do not generate tax revenues by increasing tax rates. Rather, as shown in Figure 1, the TIF district generates revenues by permitting the municipality to temporarily capture the tax revenues generated by the enhanced valuation of properties resulting from the various redevelopment projects. In a TIF-funded project, the local government permits the developer

to use a portion of these new taxes to support financing for the proposed parking project. Since a portion of the financing is repaid solely from the dedicated taxes, TIF effectively functions like a grant from the standpoint of the developer.

The premise of TIF is that real estate development generates new real estate and sales taxes above and beyond the taxes generated by land in its undeveloped state. The TIF system relies on the appreciation in value of the land and buildings in a TIF district. If a development is profitable, then the costs will be paid for in the growth of property tax revenue. If the property fails to increase in value, the improvement costs fall back on the general taxpayer. This risk makes some governments wary of employing TIF's. Such concern, while important, must be weighed against the alternative.

Figure 43: Tax Increment Financing (TIF or TIRZ)



Source: Walker Parking Consultants, 2016

Under the Tax Increment Financing Act of July 11, 1990 (53 P.S. § 6930.1 et seq.) (the TIF Act), authorities, being an industrial or commercial development authority or a redevelopment authority, and municipalities, being a county, city, city, incorporated town, township, or home rule municipality, have the authority to form TIF districts and to issue bonds to finance redevelopment projects that eliminate or prevent the spread of urban blight, discourage the loss of commerce or employment, and/or increase employment.

All proposed TIF districts must have a public hearing for affected residents and property owners to voice their opinions on the matter. TIF districts are implemented by a local ordinance that not only defines the boundaries of the district, but also establishes a fund for the deposits of TIF revenue and payment of project costs. The city or county must also develop and approve a project plan for the district, which includes economic feasibility studies, descriptions of cost, bond details, and certified details from the county tax assessor on property values within the district. The project plan must be approved by a separate ordinance.

CONVENTIONAL DEBT FINANCING

When an established public or private entity needs capital to fund a parking project, a bank or conventional loan may first come to mind. Conventional loans are loans that are not insured or guaranteed by a government agency. This method of obtaining funds for a capital improvement project involves a lending process that is often rigorous, and may result in higher financing costs incurred by the borrower. Banks want to lend to parties that have a clear record of profitable operations, that generate a cash flow sufficient to repay the loan, and that have enough collateral or assets to secure the loan. Conventional financing requirements include a clean credit record and no bankruptcies or foreclosures.

Conventional debt financing is a poor option for New Braunfels as it represents borrowing at a relatively high interest rate, relative to the city's access to tax-exempt financing. Additionally, because of the limited or no parking revenue stream, a lender would not underwrite a loan for a parking structure in New Braunfels without the backing of the city's general taxing authority or some other significant collateral.

GENERAL OBLIGATION BONDS

General obligation bonds will obtain the lowest possible interest rate or cost of borrowing for any given municipality. Because the full faith and credit of the municipality is pledged to such bonds, the rate of interest will reflect the best that the community has to offer. The primary way for a municipality to improve on its own full faith and credit pledge to a bond issue is to purchase municipal bond insurance.

The following definition of general obligation bonds is offered by www.emuni.com/glossary: "General Obligation Bond. (G.O.) A bond secured by a pledge of the issuer's taxing powers (limited or unlimited). More commonly the general obligation bonds of local governments are paid from ad valorem property taxes and other general revenues. Considered the most secure of all municipal debt. Limited in California by Proposition 13 to debt authorized by a vote of two thirds of voters in the case of local governments or a simple majority for state issuance."[7]

Care must be taken when issuing general obligation bonds to finance parking facilities. The public purpose provisions of the tax law must be observed to preserve the tax-exemption of the bond issue. Moreover, the issuance of general obligation bonds results in at least one significant implication. Most states have laws that restrict the amount of general obligation debt that can be issued by municipalities. General obligation bonds count towards the outstanding statutory debt of the municipality. Therefore, prior to issuing general obligation bonds for a parking project, the municipality must determine whether the available bonding capacity is sufficient to fund the parking project and also to support any outstanding bonding requirements which the community may be facing. Other competing priorities may dictate that the municipality's management must seek parking project funding other than general obligation bonds.

[7] http://www.emuni.com/glossary.php

REVENUE BONDS

When revenue bonds are issued to finance a parking project, the bond issuer pledges to the bond holders the revenue generated by the parking project. Revenue bonds are payable only from specifically identified sources of revenue, including pledged revenues derived from the operation of the financed parking facility, grants, and excise or other taxes. Parking revenue bonds secured solely by the revenues from a single, stand-alone, municipality-owned parking facility are acceptable at a reasonable tax-exempt rate only when irrefutable evidence is presented to indicate the existence of a stable demand generator that is anticipated to produce suitable debt service coverage from net revenues. Municipalities and other public organizations often benefit from issuing parking revenue bonds since the full faith and credit of the issuer is not pledged. However, revenue bonds traditionally carry a higher interest rate than general obligation bonds. Revenue bonds also differ from general obligation bonds in that general obligation bonds are backed by a city's ability to levy taxes. In comparison, user fees back revenue bonds. Special authorities are frequently created for the purpose of issuing parking revenue bonds.

This is not an option for New Braunfels because as stated previously, there is a limited or no paid parking market in New Braunfels. Parking revenues are not significant enough to allow for a financial services firm to underwrite parking revenue bonds.

GREEN BOND/CLIMATE BOND

Climate Bonds, or Green Bonds, issued by the Climate Bonds Initiative, are used to help fund projects that are expected to have positive environmental and/or climatic benefits. An example of a parking garage that was funded using money from a Green Bond is the Salem State University parking Garage. The 2014 Green Bonds Market reached an overall total of $36.59 billion, and the target for the 2015 market is $100 billion.

This project was viewed as controversial, given the fact that a parking garage arguably acts as an enabler for people to drive, emitting more greenhouse gases in the atmosphere. In order to justify this use of their Green Bond, the Massachusetts State College Building Authority exclaimed that the garage would reduce congestion on and around the campus and that it meets several qualifications of a 'green building.'

Climate Bonds/Green Bonds may not be the most feasible option for financing a parking garage due to the heavy skepticism of qualifying factors that make a parking garage a green structure and the discouragement to do so from the Climate Bonds Initiative.

Additional information on the Salem State University parking garage can be found here:

http://www.rtcc.org/2015/01/13/green-bond-to-fund-multi-storey-car-park/

BUSINESS IMPROVEMENT DISTRICTS

Some municipalities and county governments use business improvement districts ("BIDs") and parking tax districts as a means to generate income to fund parking facility capital

improvements and operating expenses. Both business improvement districts and parking tax districts can be used to finance the acquisition of land; the construction, operation, and maintenance of surface parking lots and parking structures; as well as the costs of engineers, attorneys and other professionals needed to complete the project.

BIDs number over 1,000 in the U.S. and are much more common than parking tax districts. BIDs, which are most often formed at the request of their member businesses, typically address a wide variety of issues not all related to parking. Common issues addressed include marketing, transit, beautification, signage, lighting, parking, street and public space maintenance, unarmed security patrols, "customer service representatives" or "ambassadors" to provide information and assistance to tourists and shoppers, etc. The collection of assessments tend to be applied uniformly on a square foot, gross receipts, or assessed value basis because benefits are universally recognized by all property owners. Typically, no exemptions or tax credits are provided to property owners who provide all or a portion of their required parking.

The Bayside District, located in Santa Monica, California, is an example of a BID. This BID was established in 2008 and provides funds for enhanced maintenance, an ambassador program, marketing and special projects, above and beyond those provided by the City of Santa Monica.

The Santa Monica BID has three zones, each with its own tax rate for varying land uses: Commercial properties in Zone 1 – the area receiving most benefit -- are assessed $0.822 per square foot. Commercial properties in Zone 2 and Zone 3 are assessed $0.412 and $0.206 per square foot respectively. Residential/Governmental properties in Zone 1, 2 and 3 are assessed $0.582, $0.292 and $0.147 per square foot respectively; and non-profits in Zone 1, 2 and 3 are assessed $0.292, $0.147 and $0.073 per square foot respectively. City-owned Parking Structures in the district are assessed at the rate of $0.147 per building square foot.[8] Assessments are collected by the Los Angeles County Tax Assessor's Office, and administered by Downtown Santa Monica, Inc. The approximate size of the funds received from this source for FY 2012/2013 was $3.5 million.

PARKING TAX DISTRICTS

A parking tax district typically addresses a narrow selection of issues directly related to parking. In cases where the municipality is the sole provider of parking, the collection of parking taxes tends to be applied in a uniform manner on an assessed value basis or as a fee per space based on zoning parking standards or requirements, and typically with a partial exemption for parking spaces provided above a threshold percentage. Typically, no commercial property is 100 percent exempt unless its owner provides 100 percent of the parking requirements mandated through the zoning ordinance within the district. Single-family residential property is usually exempt, but multi-family apartments usually are not exempt.

There are several precedents for a parking tax district in the United States. Existing parking tax districts are located in the states of California, Maryland, Nebraska, and Oregon, with the majority of parking tax districts concentrated in California. The State of California has passed

[8] Rates shown are for FY 2014/2015 | www.smgov.net

enabling legislation, including the Parking District Law of 1951, Mello-Roos Community Facilities Act of 1982, and the Parking and Business Improvement Area Law of 1989.

Following is a summary highlighting several parking tax districts in the U.S.:

- ***Montgomery County, Maryland*** - Parking District Services of Montgomery County manages parking districts in Bethesda, Montgomery Hills, Silver Spring, and Wheaton. Some of the tasks performed by Parking District Services are the management of off- and on-street parking facilities within its districts. Parking District Services is responsible for revenue collection and control, maintenance, safety and security, the funding of parking facility capital improvements, and ongoing operating and maintenance expenses. To generate the funding necessary for ongoing parking operations, each parking district collects taxes based on the assessed value of land and improvements.

    - A similar tax for unimproved non-residential properties is taxed at 50 percent of the improved rate. Several exemptions or percentage reductions from the tax are provided by the ordinance. For example, public off-street parking lots and facilities are exempt from the tax, provided that this parking is made available for general public use, or for the use of the customers of the establishment for which the exemption is claimed. Any property owner or lessee who provides the entire zoning requirements for parking is exempt. Property owners providing a portion of their parking are exempt from a portion of the tax bill in accordance with a formula that varies depending on the land use. For example, if a "retail establishment" provides between 60% and 99.9% of the general retail zoning parking requirement, the credit is 60%. At less than 60%, the credit is zero. At 100% or more, the property is exempt. (Please refer to the "Case Studies" section at the end of this chapter for a more comprehensive discussion of this parking tax district.)

- ***Tualatin, Oregon*** - Our research reveals that the city of Tualatin, OR has a Special Core Area Parking District Tax and Impact Fee. A formula is used to determine whether an owner qualifies for a tax credit. This tax credit for providing on-site parking spaces is calculated by defining "A" as the number of spaces provided by an owner, divided by the number of spaces required by the zoning ordinance. If "A" is greater than or equal to 1.0, the credit is 50 percent. If A is less than 1.0, the credit is equal to 50 percent of "A" ("A" x 50%). Thus, everyone pays at least 50 percent of the parking district tax. A developer within the Tualatin parking district may buy down up to 25 percent of the required number of parking spaces by paying an impact fee. The impact fee (payment in lieu) is determined by the number of zoning required spaces not supplied, multiplied by the $3,500 fee per space. This fee appears to support only surface parking development, as this amount is insufficient to support the cost of structured parking.

- ***Norfolk, Nebraska*** – This city manages a Vehicle Parking Tax District. The municipality provides most parking.

- ***Covina, California*** has a Vehicle Parking District Tax. This tax is assessed only on the difference between the number of spaces provided and the number required by the zoning ordinance. There are no exceptions to this tax for owners who provide parking.

- ***Alhambra, California*** includes parking within a Business Assessment District Tax. This tax is assessed uniformly on all commercial property based on the gross receipts of the business. Because this tax supports functions other than parking, such as beautification, cleaning, signage, etc., there are no exceptions for parking provided.

- In ***San Bernardino, California*** developers are allowed to make a payment in lieu, which is determined by the number of spaces required by zoning but not supplied by the replacement cost of a structured parking space, which is reappraised annually. The vehicle parking district tax is assessed as an ad valorem property tax, but a prorated credit is allowed based on the difference between the number of spaces provided and the number required by the zoning ordinance. Spaces paid in lieu are counted as though constructed.

- ***Fullerton, California*** owns almost all of the off-street parking within the city, and all businesses within the parking district were assessed a parking district tax to retire bonds for the construction of parking. No exemptions were offered as almost no properties supplied their own parking needs. Because the bond debt was retired several years ago, the parking tax district was also retired.

- ***Long Beach, California*** maintains the Belmont Shore Parking Commission, which exists as an approved city commission and enterprise fund. The commission receives parking revenue from existing facilities and tax revenue from the Parking and Business Improvement District (PBID) for the purpose of parking. This PBID has the power to impose a self-assessment of property owners and businesses, subject to a 50 percent protest vote that can terminate it at any time. Because the PBID pertains to more than parking, the tax rate is applied across the board, with no exemptions for owners who provide their own parking.

- The Vehicle Parking District of ***Pomona, California***, provides public parking for the entire downtown district. Businesses are not required to pay for parking credits or apply for parking variances. There is essentially no room for new parking. Parking is currently self-sustaining, as parking revenue from existing lots is sufficient to fund current obligations.

PAYMENT IN LIEU

As discussed earlier, in cases where a developer is allowed to pay a fee in lieu of construction of parking spaces, the number of spaces that can be deferred is limited, and the amount of the fee in lieu is based on the actual average cost of development of structured parking spaces within the district. However, spaces paid-in-lieu are counted as though constructed in determining the number of parking spaces provided by a developer.

DEVELOPMENT AND LEASE AGREEMENTS

Municipal and corporate leaders are increasingly faced with the issue of whether or not they should enter into the parking business by constructing, financing, and operating their own parking facilities. In most cases, the capital required to develop and operate a parking facility is the prevailing barrier to entry. The financial paradox faced by decision-makers is the need to allocate funds for core operation improvements to sustain and grow demand, while at the same time, fund parking expansion projects that are needed to operate. More often than not,

funding a parking expansion project is determined to be subordinate to core operation improvements.

Faced with parking issues, many industry leaders are recognizing the advantages of eliminating parking from their balance sheets and focusing on their core business. This is accomplished through a development leaseback agreement that provides an alternative method of ownership, investment, financing, and risk allocation to organizations that need parking, but face financial limitations. It is a financial tool that can allow a business or agency to expand parking operations, reduce long-term risk, and redirect capital funds from parking to core operations.

When a local agency enters into a development leaseback arrangement (thereby becoming the leasee), it may lease a facility from another public agency, a nonprofit corporation set up for that purpose, a bank or private leasing company or a joint powers authority. This lessor assigns all its rights in the leased parking facility to the lessee or trustee and acts as an intermediary between the local agency and the investors. The trick to leasing is finding someone who is willing to invest in the return from the agency's lease payments. This may be a single investor or, more frequently, a group of investors who have purchased undivided shares of the lease obligation (these shares are called "certificates of participation"). The lessee is given use of the property as though he owned it, without having capital invested in it.

The lease is typically a long-term "net" lease[9], with the leasee having the option of repurchasing the parking facility at a later time. The tenant, who previously owned the property, normally has the right at any time during the lease to buy back the parking facility, based upon a predetermined value or method of valuation. However, it is most advantageous to do so at the end of the lease, when the purchase price could be a nominal amount. Terms usually are for 15 to 20 years with options to include up to four five-year renewal periods.

Development leaseback agreements offer several advantages over other financing methods. First, an agency can obtain a parking facility without a large initial investment. Second, a lease can be used to spread the cost of a parking facility over a long period of time. Third, lease agreements do not add to agency debt. Fourth, in many cases voter approval is not a requirement as it would be with special taxes and some types of bonds. Fifth, leaseback deals can also provide the leasee with additional tax deductions, if applicable. The lessor benefits in that they will receive stable payments for a specified period of time.

Using lease financing is not without its drawbacks. The agreements necessary to finance public and private parking facilities are complicated, and involve numerous players such as bond counsel, underwriter, and trustee. Leasing, because of the uncertainties of the market and annual allocation of payments, may require higher debt payment than bonds to attract investors. Additionally, because leases are designed to be tax-exempt investments, their popularity and marketability is susceptible to changes in federal or state tax law. Also, it may be difficult to find creditworthy investors for some leases. Unlike special assessments or taxes, a lease

[9] A property lease in which the lessee agrees to pay all expenses which are normally associated with ownership, such as utilities, repairs, insurance and taxes. Also called a closed-end lease.

by itself does not generate funds on its own and requires another source of income, such as user fees, to retire any debt.

CREATION OF AN AUXILIARY ENTERPRISE FUND

Universities and municipalities often create auxiliary enterprise funds. These resources are then used to fund parking project capital improvements. By definition, an auxiliary enterprise fund is self-sustaining. This means that the auxiliary enterprise fund generates a revenue stream that is sufficient to cover ongoing operating expenses and outstanding debt service obligations.

Auxiliary enterprise funds have their own operating budgets. This operating budget is separate from the municipality's or university's general fund. These operating budgets include a stream of revenues collected from a variety of sources, including the following:

Municipalities
- Monthly leases
- Parking meter revenues
- Parking violation revenues
- Transient revenues

Universities
- Permit sales
- Parking meter revenues
- Parking violation revenues
- Transient revenues
- Transportation fees
- Reserved parking spaces

Although revenues generated by a new structured parking facility may not be sufficient to fund both the operating expenses and debt service of that particular improvement, revenues from other facilities and sources are pooled together. This revenue pool is sufficient to generate an income stream that permits the solvency of the auxiliary enterprise.

Budgeted expenses include the operating costs associated with ongoing parking operations. This may include the labor costs associated with maintenance, security, parking enforcement, revenue collection, management, and administration. Other operating costs may include utilities, supplies, and equipment.

The lifespan of a parking structure can often range from 40-50 years or more. However, because the development costs for such a structure are capitalized over a 20-30-year period, there is significant useful life remaining after all debt is retired. This remaining life means that revenues may still be generated by this debt-free facility and that these revenues may be available to offset any new debt service payments that are required to fund new parking projects.

There are many parking system auxiliary enterprise funds in operation throughout the U.S. Following are some of these funds:

Municipalities
- City of Cedar Rapids, Iowa
- City of Lincoln, Nebraska
- City of Detroit, Michigan
- City of Tampa, Florida
- City of Denver, Colorado

Universities
- Florida State University
- University of South Florida
- Penn State University
- University of Oklahoma
- University of New Mexico

New Braunfels could create an auxiliary enterprise similar to the Lancaster Parking Authority and charge this entity with running parking for the city. This could be a long-term solution for the city, however, in the short-term, this approach would not effectively work as a mechanism for funding a new parking structure.

CREATION OF A PARKING AUTHORITY

Parking authorities offer similar advantages gained through the creation of an auxiliary enterprise funds. One similarity is that parking authorities are self-supporting, meaning they generate operating revenues sufficient to cover both operating expenses and the debt service associated with any capital improvements. Parking authorities have many of the same responsibilities similar to a municipal or a university parking and transportation department. Following are some of the responsibilities of a parking authority:

- To hire and compensate staff and manage authority-owned facilities;
- To set parking rates and collect revenues from authority-owned facilities;
- To establish and manage a budget;
- To acquire property through negotiations and if necessary, through eminent domain;
- To acquire existing parking facilities;
- To contract with third parties for services and the sale of real property;
- To sue and be sued;
- To fund parking facility capital improvements;
- To design, construct, and renovate parking facilities;
- To demolish and rebuild parking facilities;
- To develop and implement master plans for municipal parking;
- To define and implement parking management strategies aimed at improving traffic flow and parking conditions; and
- To issue and retire debt.

Many states have enabling legislation that provides for the creation of a parking authority. Some states have legalized the formation of a parking authority in any city, regardless of size. Other states permit the establishment of a parking authority only in specific classes of cities. Following are some states that have parking authorities: Alabama, Alaska, California, Connecticut, Delaware, Florida, Maine, Maryland, Massachusetts, New Jersey, New York, Oklahoma, Pennsylvania, Tennessee, Virginia, Washington, and West Virginia. New York and Pennsylvania are the states with the greatest number of parking authorities.

To create a parking authority, first, enabling legislation must be in place legalizing the formation. In most cases, this enabling legislation allows a city to create a parking authority. Once the parking authority is created, most laws provide for the municipality's mayor to appoint board members. The board of directors then governs a parking authority.

Parking authorities have several distinguishing characteristics that make them different from municipal and university parking departments, including the following:

- Parking authorities are empowered to issue their own debt.
- Parking authority debt does not count toward the debt capacity of the municipality or university.
- Parking authorities can take action without approval from city government; they can be completely independent and autonomous of city government.

The following are some significant advantages and disadvantages of a parking authority:

Advantages

- Can issue own debt and not count against bonding capacity of city
- Provides a structure with a sole focus on parking-related issues
- Significantly reduced political pressures compared to city parking department
- Not subject to annual budget considerations of city government or politics
- Self-sustaining

Disadvantages

- Redundant costs of management and administration
- Higher rates of borrowing than a city issuing general obligation bonds
- Authority has power that is beyond the immediate control of the citizens

Creating a parking authority is one form of creating a parking auxiliary enterprise. Therefore, as stated previously, this solution is unlikely to help New Braunfels fund a parking structure.

PUBLIC – PRIVATE PARTNERSHIP

New Braunfels could utilize a public private partnership, in which it leases the land the proposed parking structure is planned to be constructed on to a private parking company, who then constructs the structure in exchange for the right to operate the facility and to charge fair market rates for parking to recoup their investment and to make a profit.

Other counties and municipalities have examined or taken similar measures. Polk County, Florida, gave the option serious consideration, but eventually opted against the option due to backlash from possibly charging court employees and users a fee to park, as well as associated tax payer investments that would have to be made to ensure reasonable rates could be charged.

http://www.theledger.com/article/20140218/NEWS/140219134/0/search

The parking revenue stream from a parking structure would be too small to attract private investors and commercial parking operators.

FINANCING OPTIONS FOR NEW BRAUNFELS TO CONSIDER

Walker has reviewed several options for New Braunfels to consider. Several of these options are not feasible. Other options may be feasible but not robust enough to meet all of the City's objectives. We believe the following options offer the most promise for successfully reaching a financial closing on a new parking structure:

- Engage in an annual review of parking rates and fines associated with parking citations. Periodic rate increases should at least equal inflation or increases in the cost of living. Ultimately, on-street parking should be priced higher than off-street parking to encourage vehicle turnover of short-term spaces.
- Investigate the political will to employ either a Tax-Increment Financing District or a Business or Public Improvement District (BID or PID) as a method to raise funding for a parking structure.
- Businesses located within close proximity to a parking structure are those that are mostly likely to benefit and therefore, it could be argued that these businesses would fund the facility through a BID. However, it may prove to be economically unfeasible to utilize this approach as the burden for individual property owners may be too high. In this case, the city could, in the name of economic development or based on the concept of "a rising tide raises all ships," spread the cost of a parking structure across its entire property tax base. Williamsburg, Virginia is an example of a city that is using its general fund to retire debt on a parking structure.

The City of Fort Worth has used BIDs as a mechanism to finance public parking garages. See the weblink below for additional information regarding Fort Worth and other BID-related weblinks:

http://fortworthtexas.gov/uploadedFiles/HED/2011_TIF_Annual_Report_Final_Small.pdf

http://www.statutes.legis.state.tx.us/SOTWDocs/LG/htm/LG.372.htm

http://www.texasahead.org/tax_programs/pubimprovement/

https://en.wikipedia.org/wiki/Business_Improvement_Districts_in_the_United_States

http://mrsc.org/Home/Explore-Topics/Economic-Development/Financing-Economic-Development/Parking-and-Business-Improvement-Areas.aspx

http://city-council.cityofdavis.org/Media/Default/Documents/PDF/CDD/Downtown-Parking-Task-Force/Mtg9/Att-5%20-%20PBID%20summary.pdf

Who should pay for a parking structure? The answer to this question will ultimately decide what financing mechanism is employed by the city. There is no right or wrong answer to this question. However, as previously discussed, user fees would not be sufficient to cover costs. This essentially

leaves the city with the option of funding a project through a BID or the general fund. Many cities have used both of these approaches and politics is the eventual and decisive factor.

APPENDIX A
SAMPLE SHARED PARKING AGREEMENTS

WALKER
PARKING CONSULTANTS

PARKING LOT LEASE AGREEMENT

This PARKING LOT LEASE AGREEMENT ("Agreement") is made and entered into as of this ____ day of _____, 200__, by and between the [PLEASE PROVIDE EXACT NAME OF TRUST AND NAMES OF (CO)-TRUSTEES] ("Owner"), and the CITY OF ARCADIA, a California municipal corporation ("City"). Owner and City are hereinafter sometimes referred to collectively as "parties" and individually as a "party."

R E C I T A L S

A. Owner is the owner in fee of that certain real property located at [ADDRESS], Assessor's Parcel Numbers ("APN") [APN NUMBER] located in the downtown area of the City of Arcadia, County of Los Angeles, State of California (the "Property").

B. City has requested to lease, and Owner is willing to lease, those portions of the Property more particularly depicted in Exhibit "A", attached hereto and incorporated by this reference (the "Premises"), for the purpose of providing public parking according to the terms and conditions of this Agreement.

C O V E N A N T S

Based upon the foregoing Recitals, which are incorporated into this Agreement by reference, and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by both parties, Owner and City hereby agree as follows:

1. Grant of Lease. Owner hereby leases to City, and City hereby leases from Owner, the Premises and all landscaping, improvements, and structures that will be used for the Permitted Uses (defined below) according to the terms and conditions of this Agreement.

2. Term.

2.1 Initial Term. The lease of the Premises shall be for an initial term of five (5) years (the "Initial Term"), commencing upon the date that the City Council approves in accordance with law this fully executed Agreement (the "Commencement Date") and expiring on the date that is the fifth (5^{th}) anniversary of the Commencement Date.

2.2 Automatic Renewal. Upon the expiration of the Initial Term, the lease of the Premises shall be divided into one (1) year renewable terms, wherein each one (1) year term is hereinafter referred to as a "Renewable Term." The first Renewable Term shall automatically commence upon the date that is the day immediately after the expiration of the Initial Term, and each subsequent Renewable Term shall automatically commence on the date that is the day immediately after the expiration of the previous Renewable Term. The lease of the Premises for any time after the expiration of the Initial Term (i.e., for any time during any and all Renewable Terms) is hereinafter referred to as the "Extended Term." The Initial Term and Extended Term are collectively referred to in this Agreement as the "Term."

2.3 Termination of Lease. Either party, in its sole and absolute discretion, may terminate the lease of the Premises either: (i) at the expiration of the Initial Term, or (ii) at any time during the Extended Term. The party seeking to terminate the lease shall deliver to the other party written notice thereof no later than sixty (60) days prior to the date of termination.

3. Rent and Security Deposit.

3.1 Rent. City shall pay to Owner as rent for the Premises [AMOUNT] per month (the "Rent"). The first payment of Rent shall be prorated pursuant to Section 3.4 below (if applicable) and shall be delivered to Owner no later than the date that is three (3) weeks after the Commencement Date. Each and every subsequent payment of Rent shall be delivered to Owner no later than the tenth (10^{th}) day of the month for which the Rent is due.

3.2 Security Deposit. City shall deliver to Owner, no later than the date that is three (3) weeks after the Commencement Date, a security deposit in the amount of [AMOUNT] (the "Security Deposit"). The Security Deposit shall be held by Owner as security for the performance by City of the terms and conditions of this Agreement to be kept and performed by City. Prior to the use of the Security Deposit for any obligation to be performed by City pursuant to this Agreement, Owner shall deliver written notice to City of the reason for the use, and Owner shall provide City with an opportunity to cure any failure to perform said obligation prior to the use of the Security Deposit pursuant to the cure provisions set forth in Section 10 below. If City fully performs every obligation of this Agreement to be performed by it, the Security Deposit or any balance thereof shall be returned to City upon termination of this Agreement.

3.3 Delivery. All payments and charges due under this Agreement shall be paid by City in lawful money of the United States of America, which shall be legal tender at the time of payment, at:

_____
_____
_____
Attn: _____

or to such other person or at such other place as Owner may from time to time designate in writing. Owner shall promptly deliver to City any change in address or person responsible for receiving payment of Rent. City shall not be in default of this Agreement if Owner fails to receive any payment of Rent when Owner fails to promptly deliver any change in address or person responsible for receiving payment.

3.4 Prorated Amounts. Any Rent due under this Agreement for any fractional part of a calendar month shall be prorated based on the ratio that the number of days in that month during the Term bears to the total number of days in that month.

4. Permitted Uses. For the duration of the Term, the Premises shall be used for parking by the general public and incidental uses relating thereto (the "Permitted Uses"), and for no other purpose, subject to the following conditions: (i) no overnight parking shall be permitted; (ii) parking for each vehicle used by a member of the general public shall be limited

to four (4) hours for any twenty-four (24) hour period, provided, however, that the time limits may be adjusted by mutual consent of the parties; (iii) any vehicle used by a current employee of [NAME] may park all day on the Premises, but only if such vehicle has a parking permit or sticker for such all day use clearly posted on the vehicle's bumper or windshield; and (iv) any other rules and regulations that City may impose on the general public for the use of the Premises. With respect to the condition concerning the ability of [NAME]employees to park on the Premises pursuant to clause (iii) above, the parties agree that this parking condition shall remain in effect only so long as [NAME] remains in business at its location as of the Commencement Date, and that in the event [NAME] no longer continues its business operations at such location, City shall have no obligation to comply with the parking condition set forth in clause (iii) above.

5. Improvement and Maintenance of Premises. City, at its own cost and expense, shall be responsible for the improvement and maintenance, as needed, of the Premises for use as a public parking lot, including but not limited to: (i) surfacing the parking lot; (ii) striping parking lot spaces; and (iii) providing signage, as needed. Signage shall indicate, where City determines is appropriate, that the parking lot is open for use by the general public.

6. Insurance.

6.1 General Liability. City shall obtain and keep in force and effect for the entire Term a commercial general liability insurance policy which names Owner as an additional insured, protecting against claims of bodily injury, personal injury and property damage based upon, involving, or arising out of the use or maintenance of the Premises by City. Such insurance shall be on an occurrence basis providing single limit coverage in an amount not less than One Million Dollars ($1,000,000.00) per occurrence.

6.2 Certificates. City shall provide to Owner a certificate of insurance evidencing insurance coverage as provided herein no later than the date that is three (3) weeks after the Commencement Date, and thereafter as requested by Owner until the termination of this Agreement.

6.3 Self-Insurance. In lieu of the obligations set forth in Section 6.1 and 6.2 above, City may satisfy its obligation to provide general liability insurance for the Premises through a self-insurance program, but only if City remains self-insured for no less than One Million Dollars ($1,000,000.00) in liability claims. In the event that City is self-insured, City shall deliver to Owner, no later than the date that is three (3) weeks after the Commencement Date, a statement, certificate, or other proof of financial responsibility, duly acknowledged by City's authorized representative, for One Million Dollar ($1,000,000.00) in self-insurance.

7. Indemnity. City shall indemnify, defend, and hold harmless Owner and its officers, officials, employees, agents, or representatives (collectively the "Indemnitees") against any and all claims, demands, causes of action, damages, costs, expenses, losses and liabilities, at law or in equity arising out of or relating to (i) any activity or work done, permitted, or suffered on the Premises; (ii) use of the Premises by City and its officers, officials, employees, agents, representatives, invitees, patrons, or sub-lessees; or (iii) the acts or omissions of City or its officers, officials, employees, agents, or representatives acting in an official capacity. This

indemnity shall specifically include the right to indemnification for any claims, demands, causes of action, damages, costs, expenses, losses and liabilities, at law or in equity arising from the acts or omissions, whether negligent, reckless, willful or otherwise, of any member of the public (as that term is defined below) while that member of the public is or was on or about the Premises. Notwithstanding the forgoing sentences in this Section 7, City shall have no obligation to indemnify, defend, and hold harmless the Indemnitees for any claim, demand, cause of action, damages, costs, expenses, losses and liabilities arising from or relating to (i) a pre-existing environmental condition concerning hazardous substances on or under the Premises; or (ii) any negligent, reckless, or willful act or omission of Indemnitee(s) while on or about the Premises.

For purposes this Agreement, the term "hazardous substance" shall mean any substance or material defined or designated as hazardous or toxic waste, hazardous or toxic material, a hazardous or toxic substance, or other similar term by any federal, state, or local environmental statute, regulation, or ordinance. For purposes of this Section 7, the term "member of the public" shall mean any person other the officers, officials, employees, agents, or representatives, acting in an official capacity, of Owner or City.

8. Peaceable Possession. Owner hereby warrants and represents that it has the authority to lease the Premises and to execute this Agreement. Owner further covenants and agrees that City, upon performing and quietly observing the terms and conditions of this Agreement, shall have the right to hold, occupy, and enjoy the Premises for the Permitted Uses during the Term without any interruption or hindrance from Owner, its successors or assigns, or any person or entity lawfully claiming by or through it.

9. Assignment and Subletting. Upon Owner's approval, which shall not be Unreasonably withheld, conditioned, or delayed, City shall have the right to assign or transfer this Agreement or any interest in this Agreement, and shall have the right to sublet the Premises or any part thereof, for the purpose of operating and maintaining the Premises for the Permitted Uses.

10. Default. The occurrence of any one or more of the following events shall constitute a material default ("default"): (i) the vacating or abandonment of the Premises by City; (ii) the failure by City to pay Rent when due pursuant to this Agreement, and such failure continues for a period of ten (10) days after delivery of written notice from Owner to City of said failure; and (iii) the failure by either party to observe or perform any of the obligations of this Agreement to be observed or performed by the responsible party (other than the obligation described in clause (ii) above), where such failure either: (A) continues for a period of thirty (30) days after delivery of written notice thereof from the party seeking performance, or (B) if performance cannot be completed with thirty (30) days, cure of such failure has not commenced within thirty (30) days after delivery of written notice thereof and diligently prosecuted until completion within sixty (60) days of the expiration of the thirty (30) day period (for a total of ninety (90) days). Upon an event of default and after the expiration of the applicable cure period, this Agreement and City's right to lease the Premises shall terminate upon the date that is one day after the date of expiration of the applicable cure period unless the party in default cures the default within the applicable cure period.

11. Miscellaneous.

11.1 Binding on Heirs. This Agreement shall be binding upon the parties hereto and inure to their respective representatives, transferees, successors, and assigns.

11.2 Litigation Expenses. If either party to this Agreement commences an action against the other party to this Agreement arising out of or in connection with this Agreement, the prevailing party shall be entitled to recover reasonable attorneys' fees, expert witness fees, costs of investigation, and costs of suit from the losing party.

11.3 Notices. All notices required to be delivered under this Agreement to another party must be in writing and shall be effective: (i) when personally delivered by the other party or messenger or courier thereof; (ii) three (3) business days after deposit in the United States mail, registered or certified; (iii) one (1) business day after deposit before the daily deadline time with a reputable overnight courier or service; or (iv) upon receipt of a telecopy or fax transmission, provided a hard copy of such transmission shall be thereafter delivered in one of the methods described in the foregoing (i) through (iii); in each case postage fully prepaid and addressed to the respective parties as set forth below or to such other address and to such other persons as the parties may hereafter designate by written notice to the other parties hereto:

To City: City of Arcadia

Copy to:

To Owner: _____
_____
_____
Attn: _____

Copy to: _____
_____
_____
Attn: _____

11.4 Entire Agreement, Waivers, and Amendments. This Agreement incorporates all of the terms and conditions mentioned herein, or incidental hereto, and

supersedes all negotiations and previous agreements between the parties with respect to all or part of the subject matter hereof. All waivers of the provisions of this Agreement must be in writing and signed by the appropriate authorities of the party to be charged. A waiver of the breach of the covenants, conditions or obligations under this Agreement by either party shall not be construed as a waiver of any succeeding breach of the same or other covenants, conditions or obligations of this Agreement. Any amendment or modification to this Agreement must be in writing and executed by the appropriate authorities of City and Owner.

11.5 Interpretation; Governing Law. This Agreement shall be construed according to its fair meaning and as if prepared by all of the parties hereto. This Agreement shall be construed in accordance with the internal laws of the State of California without regard to any conflict of law principles in effect at the time of the execution of this Agreement.

11.6 Severability. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

11.7 Force Majeure. In the event that either party is delayed, hindered, or prevented from performing any act required hereunder by reason of strikes, lockouts, or other labor troubles, inability to procure or shortage of materials or supplies, failure of power, energy shortages, restrictive governmental laws or regulations, inclement weather, fire, explosion, earthquake or other casualty, riots, insurrection, war, act of God, or other causes that are without the fault and beyond the reasonable control of such Party, then the performance of the party obligated to perform under this Agreement shall be excused for and extended by the period of such delay.

11.8 Headings. Section and Subsection headings in this Agreement have been inserted solely for the convenience of the parties, and such captions, headings, and titles shall in no way define or limit the scope, intent, or application of any provision of this Agreement.

11.9 Time is of the Essence. Time is of the essence with respect to every provision of this Agreement.

11.10 Computation of Time. Unless otherwise specified in this Agreement, use of the word "days" shall mean calendar days, and any provision requiring the computation of time shall be based upon a standard calendar of three hundred sixty five and one-quarter (365 ¼) days.

11.11 Execution in Counterpart. This Agreement may be executed in several counterparts, and all so executed shall constitute one agreement binding on all parties hereto, notwithstanding that all parties are not signatories to the original or the same counterpart.

[signatures on next page]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first set forth above.

"CITY"

CITY OF ARCADIA,
a California municipal corporation

By: _____
Mayor

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

"OWNER"

By: _____
Its: _____

By: _____
Its: _____

Model - Shared Use Agreement for Parking Facilities

This Shared Use Agreement for Parking Facilities, entered into this ____ day of _____, _____, between _____, hereinafter called lessor and _____, hereinafter called lessee. In consideration of the covenants herein, lessor agrees to share with lessee certain parking facilities, as is situated in the City of _____, County of _____ and State of _____, hereinafter called the facilities, described as: [Include legal description of location and spaces to be shared here, and as shown on attachment 1.]

The facilities shall be shared commencing with the ____ day of _____, _____, and ending at 11:59 PM on the ____ day of _____, _____, for [insert negotiated compensation figures, as appropriate]. [The lessee agrees to pay at [insert payment address] to lessor by the _____ day of each month [or other payment arrangements].] Lessor hereby represents that it holds legal title to the facilities

The parties agree:

1. USE OF FACILITIES
This section should describe the nature of the shared use (exclusive, joint sections, time(s) and day(s) of week of usage.
-SAMPLE CLAUSE-*[Lessee shall have exclusive use of the facilities. The use shall only be between the hours of 5:30 PM Friday through 5:30 AM Monday and between the hours of 5:30 PM and 5:30 AM Monday through Thursday.]*

2. MAINTENANCE
This section should describe responsibility for aspects of maintenance of the facilities. This could include cleaning, striping, seal coating, asphalt repair and more.
-SAMPLE CLAUSE-*[Lessor shall provide, as reasonably necessary asphalt repair work. Lessee and Lessor agree to share striping, seal coating and lot sweeping at a 50%/50% split based upon mutually accepted maintenance contracts with outside vendors. Lessor shall maintain lot and landscaping at or above the current condition, at no additional cost to the lessee.]*

3. UTILITIES and TAXES
This section should describe responsibility for utilities and taxes. This could include electrical, water, sewage, and more.
-SAMPLE CLAUSE-*[Lessor shall pay all taxes and utilities associated with the facilities, including maintenance of existing facility lighting as directed by standard safety practices.]*

4. SIGNAGE
This section should describe signage allowances and restrictions.
-SAMPLE CLAUSE-
[Lessee may provide signage, meeting with the written approval of lessor, designating usage allowances.]

5. ENFORCEMENT
This section should describe any facility usage enforcement methods.
-SAMPLE CLAUSE-*[Lessee may provide a surveillance officer(s) for parking safety and usage only for the period of its exclusive use. Lessee and lessor reserve the right to tow, at owners expense, vehicles improperly parked or abandoned. All towing shall be with the*
approval of the lessor.]

6. COOPERATION
This section should describe communication relationship.
-SAMPLE CLAUSE-*[Lessor and lessee agree to cooperate to the best of their abilities to mutually use the facilities without disrupting the other party. The parties agree to meet on occasion to work out any problems that may arise to the shared use.]*

7. INSURANCE
This section should describe insurance requirements for the facilities.
-SAMPLE CLAUSE-*[At their own expense, lessor and lessee agree to maintain liability insurance for the facilities as is standard for their own business usage.]*

8. INDEMNIFICATION
This section should describe indemnification as applicable and negotiated. This is a very technical section and legal counsel should be consulted for appropriate language to each and every agreement.
-NO SAMPLE CLAUSE PROVIDED-

9. TERMINATION
This section should describe how to or if this agreement can be terminated and post termination responsibilities.
-SAMPLE CLAUSE-*[If lessor transfers ownership, or if part of all of the facilities are condemned, or access to the facilities is changed or limited, lessee may, in its sole discretion terminate this agreement without further liability by giving Lessor not less than 60 days prior written notice. Upon termination of this agreement, Lessee agrees to remove all signage and repair damage due to excessive use or abuse. Lessor agrees to give lessee the right of first refusal on subsequent renewal of this agreement.]*

10. SUPPLEMENTAL COVENANTS
This section should contain any additional covenants, rights, responsibilities and/or agreements.
-NO SAMPLE CLAUSE PROVIDED-

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date Set forth at the outset hereof.

[Signature and notarization as appropriate to a legal document and as appropriate to recording process negotiated between parties.]

Please return to: Administrative Staff, Cary Planning Department, P.O. Box 2008, Cary, NC 27512-8005

STATE OF NORTH CAROLINA
COUNTY OF WAKE

SAMPLE
Shared Parking Agreement

This Shared Parking Agreement ('Agreement') entered into this _____ day of _____, 200__ by and between _____, whose address is _____, and Parcel Identification Number (PIN) is _____ ('Lessor') and _____, whose address is _____, and Parcel Identification Number (PIN) is _____ ('Lessee').

1. To relieve traffic congestion in the streets, to minimize any detrimental effects of off-street parking areas on adjacent properties, and to ensure the proper and uniform development of parking areas throughout the Town, the Town of Cary Land Development Ordinance ('LDO') establishes minimum number of off-street parking and loading spaces necessary for the various land uses in the Town of Cary; and
2. Lessee owns property at _____, Cary, N.C. ('Lessee Property') which property does not have the number of off-street parking spaces required under the LDO for the use to which Lessee Property is put; and
3. Lessor owns property at _____, Cary, N.C. ('Lessor Property') which is zoned with the same or more intensive zoning classification than Lessee Property and which is put to a use with different operating hours or different peak business periods than the use on Lessee Property; and
4. Lessee desires to use some of the off-street parking spaces on Lessor Property to satisfy Lessee Property off-street parking requirements, such shared parking being permitted by the Town of Cary LDO, Section 7.8.3; and
5. Town LDO requires that such shared use of parking spaces be done by written agreement.

NOW THEREFORE, in consideration of the premises and the information stated above, the parties agree as follows:

1. SHARED USE OF OFF STREET PARKING FACILITIES

Per Section 7.8.2, Town of Cary Land Development Ordinance (Off-Street Parking Space Requirements), Lessor is required _____ off-street parking spaces and has _____ existing off-street parking spaces, which results in an excess of _____ off-street parking spaces. Lessee is required _____ off-street parking spaces and has _____ existing off-street parking spaces.

Lessor hereby agrees to share with Lessee a maximum of _____ off-street parking spaces associated with Lessor's Property, which is described in more detail on Attachment 1, attached hereto and incorporated herein by reference ('Shared Spaces').

Lessee's interest in such parking spaces is non-exclusive. The Lessee's shared use of parking shall be subject to the following:

[describe the time, days etc of the use and the nature of the shared use, limits on time vehicles may be parked, etc.]

2. TERM

This Agreement shall be effective upon execution by both parties and shall be accepted by the Planning Director and shall not be amended and/or terminated without written consent of both parties and the Cary Planning Director, or his/her designee.

3. SIGNAGE

Directional signage in accordance with Chapter 9, Town of Cary Land Development Ordinance and the written approval of Lessor may be added to direct the public to the shared parking spaces.

4. COOPERATION

The parties agree to cooperate and work together in good faith to effectuate the purpose of this Agreement.

5. SUPPLEMENTAL COVENANTS

No private agreement shall be entered into that overrides this agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date Set forth at the outset hereof.

(Lessor)	(Date)
(Lessee)	(Date)
(Planning Director)	(Date)

_____**COUNTY, NORTH CAROLINA**

SWORN TO AND SUBSCRIBED before me this _____ day of _____, 20_____

(Official Seal)

_____
Signature of Notary Public

_____
My Commission Expires

_____**COUNTY, NORTH CAROLINA**

SWORN TO AND SUBSCRIBED before me this _____ day of _____, 20_____

(Official Seal)

_____
Signature of Notary Public

_____
My Commission Expires

THE CITY OF SAN DIEGO

RECORDING REQUESTED BY:
THE CITY OF SAN DIEGO
AND WHEN RECORDED MAIL TO:

_____

_____

_____

(THIS SPACE IS FOR RECORDER'S USE ONLY)

SHARED PARKING AGREEMENT

This SHARED PARKING AGREEMENT ("Agreement") is entered into and effective _____, 20_____, by and between _____, _____and the City of San Diego.

RECITALS

WHEREAS, pursuant to sections 142.0535 and 142.0545 of the Land Development Code, the City of San Diego specifies criteria which must be met in order to utilize off-site shared parking agreements to satisfy on-site parking requirements.

NOW, THEREFORE, in consideration of the recitals and mutual obligations of the parties as herein expressed, _____, _____ and the City of San Diego agree as follows:

1. _____ the owner of the property located at _____, agrees to provide _____ the owner of the property located at _____ with the right to the use of (____) parking spaces _____ from _____ as shown on Exhibit A to this Agreement on property located at _____.

   1.1 Applicant: _____ Co-Applicant: _____
   Assessor Parcel No: _____ Assessor Parcel No: _____
   Legal Description: _____ Legal Description: _____
   _____ _____

2. The parking spaces referred to in this Agreement have been determined to conform to current City of San Diego standards for parking spaces, and the parties agree to maintain the parking spaces to meet those standards.

3. The Parties understand and agree that if for any reason the off-site parking spaces are no longer available for use by _____, _____ will be in violation of the City of San Diego Land Development Code requirements. If the off-site parking spaces are no longer available, Applicant will be required to reduce or cease operation and use of the property at Applicant's address to an intensity approved by the City in order to bring the property into conformance with the Land Development Code requirements for required change for required parking. Applicant agrees to waive any right to contest enforcement of the City's Land Development Code in this manner should this circumstance arise.

   Although the Applicant may have recourse against the Party supplying off-site parking spaces for breach of this Agreement, in no circumstance shall the City be obligated by this agreement to remedy such breach. The Parties acknowledge that the sole recourse for the City if this Agreement is breached is against the Applicant in a manner as specified in this paragraph, and the City may invoke any remedy provided for in the Land Development Code to enforce such violation against the Applicant.

Continued on Page 2

4. The provisions and conditions of this Agreement shall run with the land for those properties referenced in paragraph 1 of this document and be enforceable against successors in interest and assigns of the signing parties.

5. Title to and the right to use the lots upon which the parking is to be provided will be subservient to the title to the property where the primary use it serves is situated.

6. The property or portion thereof on which the parking spaces are located will not be made subject to any other covenant or contract for use which interferes with the parking use, without prior written consent of the City.

7. This Agreement is in perpetuity and can only be terminated if replacement parking has been approved by the City's Director of the Development Services Department and written notice of termination of this agreement has been provided to the other party at least sixty (60) days prior to the termination date.

8. This Agreement shall be kept on file in the Development Services Department of the City of San Diego in Project Tracking System (PTS) Project Number: _____ and shall be recorded on the titles of those properties referenced in paragraph 1 of this document.

In Witness whereof, the undersigned have executed this Agreement.

_____
Applicant

Date: _____

_____
Party/Parties Supplying Spaces

Date: _____

_____
Deputy Director

Business and Process Management, Development Services

Date: _____

NOTE: ALL SIGNATURES MUST INCLUDE NOTARY ACKNOWLEDGMENTS PER CIVIL CODE SEC. 1180 ET.SEQ.

Reset Button Page 2

Print Form

Shared Parking Agreement

'160.117(E)(4): A Shared parking. Formal agreements which share parking between intermittent uses with non-conflicting parking demands (eg. a church and a bank) are encouraged as a means to reduce the amount of parking required. Such agreements are subject to the approval of the Planning Commission. Individual spaces identified on a site plan for shared users shall not be shared by more than one user at a time.@

As owner(s) of the property located at _____, I (we) hereby agree to share _____ parking spaces (as shown on attached site plan) during the following times and days:

_____

_____

_____

The following restrictions apply:

_____

_____

_____

Required parking

My (our) property requires_____ parking spaces based upon the City's parking lot ordinance. The use of my (our) property is_____ and it contains _____square feet.

The applicant's property requires_____ parking spaces based upon the City's parking lot ordinance. The use of the applicant's property is _____and it contains _____ square feet.

Site Plan

Attach a diagram of the entire parking lot. Enumerate spaces to be shared per this agreement. Also indicate any spaces within this lot which are shared with other entities.

Owner Signature:_____ Date:_____

Owner Signature:_____ Date:_____

Applicant Signature:_____ Date:_____

NEW BRAUNFELS, TX

MEETING MINUTES - STAKEHOLDER SUMMARY

JANUARY 7, 2016 PROJECT NO. 25-1929.00

STAKEHOLDER NOTES: City Government/Merchants

Comments:

- Meter parking
  - Number of Kiosks if they do this
- Other best practices of other cities
- This is a vehicle oriented city
- Fee in-lieu of
- Those that provide parking are subsidizing others
- Need alternatives of revenue to pay for operating and maintenance
- HC parking is lacking
- This group wants to review draft report
- Tourist season is peak
  - Lots of spill-over parking
- Elks lots fill up
- Ask police department

NEW BRAUNFELS, TX

MEETING MINUTES - STAKEHOLDER SUMMARY

JANUARY 8, 2016 PROJECT NO. 25-1929.00

STAKEHOLDER NOTES: County

Comments:

- Lot 2 – Block 2 (utilized for jury days)
  - County owns block
- County garage is employee only
  - Built in 85-86
  - Securing concern
- Surface Lots allow for public parking
- Future plans to renovate annex & other buildings
  - Allows for additional court
- Election center moving from block 10 to block 2
- Historical District covers most of the study area

NEW BRAUNFELS, TX

STAKEHOLDER GROUP SUMMARY

WALKER PARKING CONSULTANTS

PROJECT NO. 25-1929.00

STAKEHOLDER NOTES: Merchants/Business Owners

Comments:

- Steakhouse does not have parking – only use on-street
- People who work downtown have nowhere to park
- 2 hrs not long enough – make it 3 hours
- Spaces not well marked and not well signed
- Better lighting
- San Antonio east side is full during summer months
- Meter the prime areas? And have free parking on outskirts
- Co-op on block 15 could be redeveloped into parking. It is a dirty eye sore.

NEW BRAUNFELS, TX

MEETING MINUTES - STAKEHOLDER SUMMARY

WALKER PARKING CONSULTANTS

JANUARY 8, 2016 PROJECT NO. 25-1929.00

STAKEHOLDER NOTES: Property Owners

Comments:

- County courts can impact parking
- Tickets & enforcement can be aggressive
- 2 hr parking worked at one time
- Need parking meters to control parking
- Downtown competes with Gruene
- Enforcement is important
- There are several buildings downtown that have open space in upper floors that are ripe to redevelop or more intense usage
- They like the existing "no parking" requirement as long as building footprint isn't changed. Changing this will stall development.
- Parking is always an issue everywhere in town
- City should "invest" in parking to help promote development