

*City of San Marcos*



# PARKING IMPLEMENTATION PLAN

**On-Street Paid Parking Program  
Implementation Plan (Draft)**

**Kimley»Horn**

Expect More. Experience Better.





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## On-Street Paid Parking Program Implementation Plan (DRAFT)

### I. Executive Summary

The purpose of this report is to present Kimley-Horn's professional recommendations regarding the implementation of on-street paid parking in San Marcos.

The report provides a detailed summary of data collection and analysis efforts and incorporates this data analysis into a rigorous evaluation of the potential for on-street paid parking in downtown San Marcos.

Our primary recommendation is to move forward with the phased implementation of on-street paid parking within the proposed parking benefit districts based on four primary factors:

1. Parking utilization and violation rate data collected using the License Plate Recognition system in 2018;
2. Industry standard paid parking assessment criteria, which is described in greater detail in Section IV of this report;
3. Support of multiple stakeholder groups, as represented by the support expressed for the Parking Management Framework Plan by the Downtown Association of San Marcos; and
4. City's expressed desire to promote transportation demand management strategies and promote parking management as an economic development strategy.

The recommended on-street paid parking program will improve on-street parking turnover for the benefit of the downtown businesses, will reduce or reallocate student parking in the downtown area, and will generate revenue to support an active parking management function within City government and advance additional transportation demand management initiatives.

### *On-Street Paid Parking Recommendations*

- Implement on-street paid parking in the area between the Texas State University campus and San Antonio Street.
- On-street paid parking hours Monday - Friday, from 9:00 am to 6:00 pm.
- Retain existing two-hour time limit in the paid parking area.
- Establish an initial rate of \$1.00 per hour.
- Grant administrative flexibility, with oversight from Parking Advisory Board, to set paid hours, time limits, and rates.
- Establish a rate range of \$1.00 minimum up to \$3.00 maximum.
- Conduct on-going utilization studies of high demand parking areas.



- Use the On-Street Paid Parking Assessment criteria to determine future paid parking expansion.
- Create defined parking “zones” within the paid parking area to facilitate pay-by-cell phone applications.
- Amend the existing Residential Parking Permit program policies and procedures to reflect and integrate the new LPR system.
- Create on-street permits in lower demand areas, where the City can lease for monthly permits.
- Designate 10-hour zones to accommodate employee parking in the short-term until additional off-street parking resources are developed.

The Implementation Plan envisions continued monitoring of on-street parking occupancy, turnover, and enforcement data, and future expansion of the paid parking area per the On-Street Paid Parking Assessment Criteria used to determine the Phase I paid parking area.

### *Technology Recommendations*

- Invest in a multi-space parking meter system that supports “pay-by-license plate” methodology.
- Invest in Pay-by Cell mobile parking application.

Initial Revenue & Capital Cost Estimates indicate an approximately one-year payback period for the City’s initial investment in parking technology. That is to say, the cost of purchase and installation of parking technology should be roughly equal to the amount of parking revenue generated in the first year of operation.

### *Parking Benefit Districts Recommendations*

- Establish Parking Benefit Districts, a “Downtown Benefit District” and a “River Benefit District,” to encourage support for on-street paid parking by dedicating a percentage of net meter revenue back to the areas it was generated.
- 30% / 70% revenue split with 30% dedicated to the Parking Benefit Districts.
- Council appointed Parking Advisory Board oversees distribution of funds.
- Specific terms and conditions for the use of these funds, and who controls their disbursement, should be established by Ordinance.
- Common Parking Benefit District expenditures include sidewalk/walkability improvements, district beautification, and transportation or parking investments.



## II. Background

This document provides more detailed information related to the development of a parking management program for the City of San Marcos, TX. This plan was also developed in anticipation of moving from the current free on-street parking condition to implementing paid on-street parking in a defined area of the downtown.

Earlier this year, Kimley-Horn prepared two high level parking planning documents for the City of San Marcos. These included:

- A “Parking Program Framework Plan,” and
- A “Parking Organization and Staffing Plan.”

A brief overview of each document is provided below as they provide important context for the consideration of on-street paid parking implementation.



## *Parking Program Framework Plan*

The "Parking Program Framework Plan" provides a high-level program overview for the development of a comprehensive and strategic approach to managing parking in the downtown area of San Marcos, TX. It identifies key program objectives, recommended program vision and mission statements, a set of program "guiding principles" as well as a set of primary action items to guide program evolution and development.

In addition, several appendices were provided which will form the beginnings of "parking management toolkit" to aid the recommended program manager in the implementation of the framework plan. This toolkit will include a wide range of resources including an extensive set of parking management best practices, white papers on technical topics, sample manuals, checklists, policies/procedures, maintenance manuals, etc.

## Primary Objectives

This Parking Program Framework Plan is intended to be a guide for decision makers on topics such as governance, customer service, planning, technology, enforcement, as well as parking facility and systems management. Specific objectives include providing strategies and tools to:

- Identify governance and management structures that will work best for San Marcos that will also contribute to the successful implementation of other recommendations
- Improve public perceptions of parking within the study area
- Position parking as a contributor to continued redevelopment and economic expansion of Downtown
- Provide recommendations on establishing positive and proactive customer relations
- Explore the range of parking management strategies that can be used by the City's management staff to encourage on-street parking turnover and promote increased community vitality without unduly penalizing infrequent violators
- Identify management strategies and technologies that can improve the customer experience, while also controlling operating costs and enhancing system financial performance.
- Position parking management within the larger "mobility management" context in a way that promotes a balanced system of parking and multi-modal transportation alternatives.

## Vison/Mission/Guiding Principles

Beginning on page 7 this report provides recommended program vision and mission statements, followed by a recommended set of program guiding principles.

## Primary Action Items

Each primary action item is formatted to provide an action item description, intended result, the entity or agency primarily responsible for implementation, key community partners, and a recommended timeframe for implementation and supportive documents provided to assist with implementation.



**Primary Action Item #1: Create & Empower Parking Management Organization**

Adopt new program vision and mission statements and recommended parking program guiding principles. Hire a parking management professional and engage a parking management firm (at least for an initial 3-year term). Create a parking advisory board and begin implementing parking management best practices.

**Primary Action Item #2: Establish Parking Benefit District(s)**

Create "Parking Benefit Districts" to encourage support for implementing on-street paid parking by dedicating a percent of net on-street meter revenue back to the districts in which they were generated. An ordinance should be developed to define the specific terms and conditions for the use of these funds and who controls their disbursement.

**Primary Action Item #3: Invest in Parking Management Technology**

Investment in new on-street and off-street parking technology. Recommended new on-street parking meters can provide the parking program with improved management and system utilization data. However, simply having the data is not enough. It must be collected, tracked and analyzed for it to be of value from a planning perspective.

**Primary Action Item #4: Manage On-Street Parking More Efficiently**

Improve utilization and turnover of the City's valuable on-street parking spaces for the benefit of the business that depend on them for customer parking. Reduce employee and student abuse of these spaces through the implementation of paid on-street parking.

**Primary Action Item #5: Seek Opportunities to Expand Parking Supply**

Development of mid to long-term surface parking resources. Identify potential sites, or other opportunities, for mid to long-term surface parking lots capable of meeting the needs of downtown employees and longer-term parkers. New surface parking supply will support implementation of on-street paid parking.

**Primary Action Item #6: Connect Parking Management & Economic Development**

Leverage parking as a community and economic development strategy and begin developing a comprehensive parking planning function.

**Primary Action Item #7: Program Branding & Marketing**

Develop a new parking program brand and marketing program including significant on-going community outreach strategies.

**Primary Action Item #8: Develop Staff Parking Management Expertise**

Invest in training and staff development with a goal of mastering the fundamentals of parking system management and operations. Develop a set of parking management data benchmarks (a list of recommended key performance indicators will be provided) and provide city administration with regular updates on program development/management goals and accomplishments.



**Primary Action Item #9: Continuous Improvement in Parking Enforcement**

Assess the current parking enforcement program using the tools provided. Leverage the investment made in mobile license plate recognition technology by enhancing the operational efficiency of the current enforcement program, using the data to support on-going parking planning efforts and improving citation collection ratios over time.

**Primary Action Item #10: Embrace Parking as Mobility Management**

Expand the scope of the parking program over time to be more supportive of alternative modes of transportation and embrace more of a “mobility management” philosophy.

**Primary Action Item #11: Establish Mobility Management Enterprise Fund**

Establish the parking program as a separate enterprise fund and combine all parking related revenue streams into this fund. Develop a parking program financial plan.



## *Parking Organization and Staffing Plan*

The “Parking Organization and Staffing Plan” provides a recommended program organizational structure, followed by a discussion of parking program “operational methodologies,” and finally an extensive review of successful parking system organizational options.

### Recommended Organizational Option

The recommended approach proposes the adoption of a “hybrid” of several of the organizational models described in the Organization and Staffing Plan report, to account for several key factors that are specific to the current and future conditions in the City of San Marcos. Some of these community specific factors include:

- The size of the community and the fact that parking management will essentially be a new operational function and that there is a lack of existing expertise to manage this specific discipline
- The desire for improved coordination and collaboration between the City, County, University and downtown stakeholders
- The desire to align parking policy and programs with the recently approved Community Development Code
- The desire to leverage parking management as a tool for community and economic development.

The preferred organizational option for the City of San Marcos merges the following two organizational models:

- The Vertically Integrated City Department model, and
- The Professional Services/Out-Sourced Management Model

This approach is seen as the best option for the City of San Marcos because it envisions a small, lean staff that could be housed in the City, preferably in the Economic Development department. Part of this recommendation is in recognition that the overall program will be relatively small, reflecting the size of the community and the relative program budget. This option begins small from a staffing perspective but is scalable over time if needed.

### Parking Manager

One of the most important actions that needs to be undertaken is the authorization of a parking manager position and the recruitment/hiring of a parking manager. We highly recommend that the City recruit and hire a high caliber individual that has both parking and transportation management experience and excellent communications skills, the vision to guide program development and someone who can work well in a team environment.

The program manager position should have strong planning, program development and communications abilities. He/She needs to be able to generate trust and confidence in community stakeholders and with City administration and City Council.



The primary responsibility of the program manager, initially, will be program and policy development and assuming the hiring of a private parking management firm (at least initially), he/she will provide contract management and administrative services. This would include such items as:

- Coordinating with other City departments/functions
- Recommending parking rates/fines and other policies
- Reviewing and approving program operational budgets
- Implementing directives from and reporting to the city administration and City Council
- Developing an RFP to hire a private parking management firm
- Working with the private parking management firm to develop standard operating polices/procedures in a variety of areas

Parking is a complex function and is inter-related with many other City functions. Parking can also be very controversial and requires a manager that can generate confidence and trust while also being politically astute. An extensive document has been provided in the report appendices which provides an overview of parking administrator positions from around the country including salary information, examples of program scopes and several example position descriptions.

As the department expands its scope and matures, new potential areas of staff development and recruitment might include “accounting and auditing”, “planning and community education” and “special projects”.

To achieve a more fully integrated parking program, it is envisioned that additional functions will be added over about a five-year period. These additional functions should include:

1. A more robust parking planning function (working with City Planning on parking and related transportation issues). There are a number of parking specific planning tools that will be recommended. Parking should also be at the table when issues related to community master planning, zoning code changes and parking requirements are debated and amended.
2. Better integration and collaboration with downtown management and economic development programs. One of the lessons learned from other communities is the extent to which parking can become a true community partner in terms of downtown revitalization and development efforts. Collaborative program initiatives and participation on boards and committees and generally closer working relationships can generate significant community wide benefits to all parties.
3. A specific focus on developing programs related to transportation demand management, transportation alternatives and other sustainable transportation program options should be developed over time. In the long-term, the parking program should evolve to adopt a more comprehensive and balanced mobility management function.



#### Private Parking Management Firm

The outsourced management component recognizes that no significant parking management expertise currently exists within the City. After the initial three-year term of the private parking management firm, an assessment should be conducted to determine whether the firm has delivered enough value for the parking management fee to be continued or whether the program could be managed exclusively with in-house staff.

Engaging a private parking management firm (at least for an initial three-year term) will provide the following benefits:

- Helps ensure that the program gets successfully established.
- Provides a base of parking management experience and competence.
- Provides the City with a built-in advisory function during the early years (all the major private parking management firm will pitch this as a benefit).
- Provides established business practices, tools, forms, policies, procedures, etc. – in essence the private parking management firm can help get all the program operational basics in place more quickly and efficiently than can be done by creating a program from scratch with only internal resources.
- Provides a robust set of system reporting options including detailed revenue and expense reports, program budgets, maintenance programs, etc.

#### Parking Advisory Board

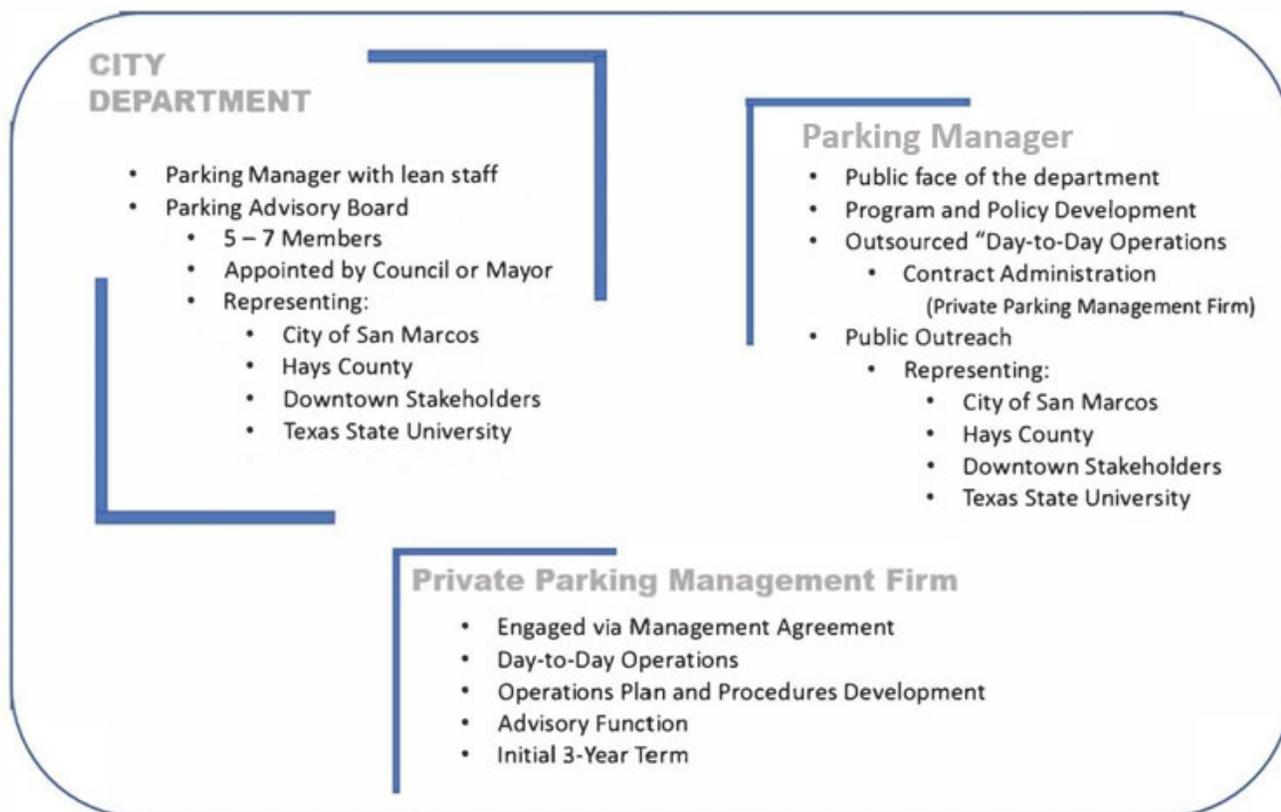
This organizational recommendation also envisions some form of Parking Advisory Board to provide a mechanism for ensuring on-going community engagement and input. The envisioned Parking Advisory Board should attempt to recruit a range of community leaders who are both invested in downtown San Marcos and have strong business backgrounds to provide sound direction and guidance. Examples of the type of expertise desired for parking commission members might include:

- City Council member(s)
- Economic Development Director
- County representative
- Invested community representatives
- Representative of a large employer
- Property owners / Developers
- Business leaders/Merchant's Association leaders, etc.
- Representative from the transit agency
- Active transportation advocates



A framework should be developed whereby certain “policy-level decisions” are defined as the responsibility of the City Council and more “operational level decisions” are ceded to the Parking Advisory Council and/or parking manager. If there are certain policy decisions that the City Council decides should be made only by elected officials, these policy areas should be defined up front.

The following exhibit summarizes the functions and relationships between the Parking Manager, Private Parking Management Firm, and the Parking Advisory Board, as envisioned under the recommended “hybrid” organizational option:





### III. Parking Data Analysis (2018)

#### *On-street parking utilization surveys (using the City's LPR system)*

Two on-street parking occupancy data collection surveys were conducted in the months of August and September 2018 to document parking conditions while Texas State University was not in session and again once the Fall semester was in session. The first and second rounds of parking data collection occurred August 2, 2018 and September 12, 2018 respectively. Three full parking surveys of the study area were collected throughout both days. Parking data was collected at 10 am, 1 pm, and 7 pm using mobile License Plate Recognition (LPR) equipment. The LPR technology allows for collection of a more detailed set of data, which can increase the accuracy and efficiency of collection efforts, especially for duration and turnover analyses.

During the August 2<sup>nd</sup> data collection, the peak hour was observed at 1 pm with an overall average occupancy of 57 percent. Although the study area as a whole is below the effective capacity threshold of 85 percent, there were 12 blocks within the study area (216 spaces of the total 722 spaces) that observed occupancies over this threshold.

In the second round of data collection on September 12<sup>th</sup>, the peak hour was also observed at 1 pm with an overall average occupancy of 70 percent. This was a total increase of 13 percent compared to the peak hour occupancy in August. During the peak hour (1 pm) a total of 19 blocks were observed to have occupancies over the 85 percent threshold, for a total of 42 percent of the overall study area (302 spaces of the total 722 spaces).

The data collection results for the two peak demand occupancy counts are summarized in the parking occupancy "heat maps" on the following pages.

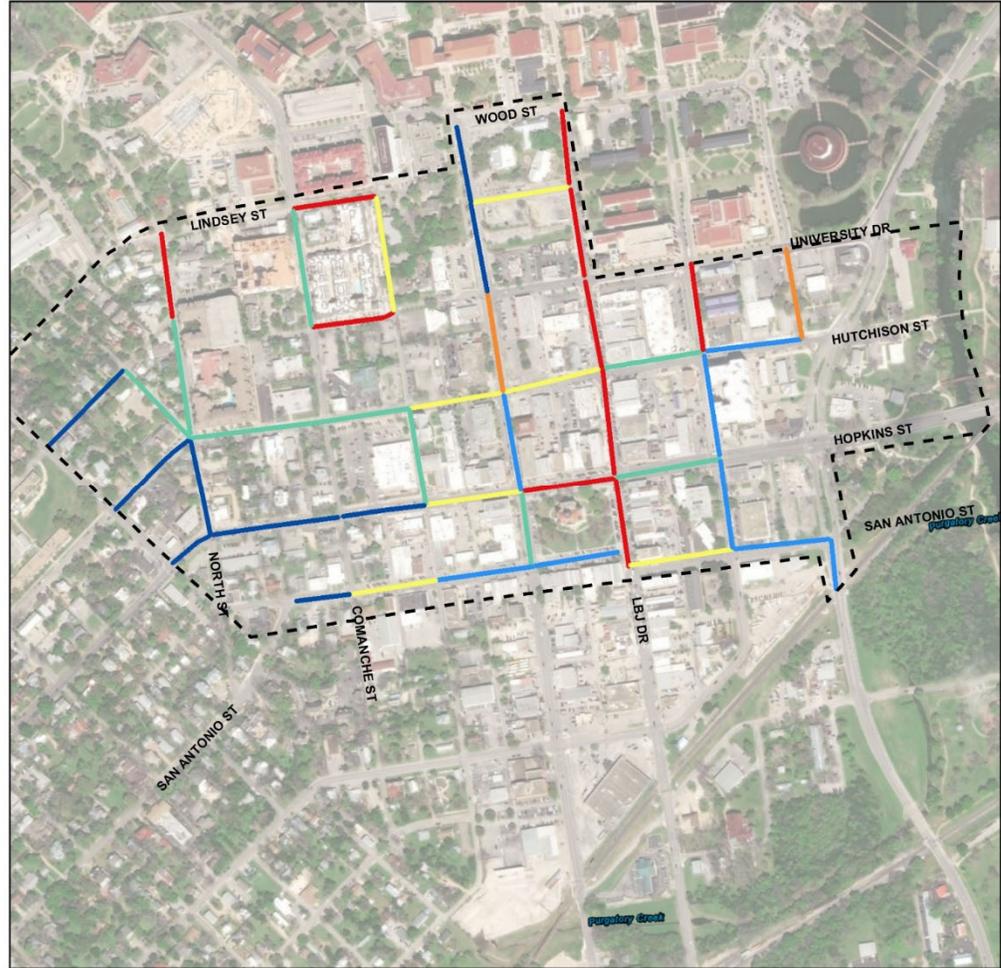


**Downtown San Marcos**  
*On-Street Parking*  
*Occupancy Survey*  
 August 2, 2018

**Legend**

- [- - -] Study Area Boundary
- Parking Occupancy (1 PM)**
- 0 - 25 %
- 25 - 50 %
- 50 - 75 %
- 75 - 85 %
- 85 - 90 %
- 90+ %

Total On-Street Parking - 722 Spaces  
 Study Area Avg Occupancy (1 PM) - 57%



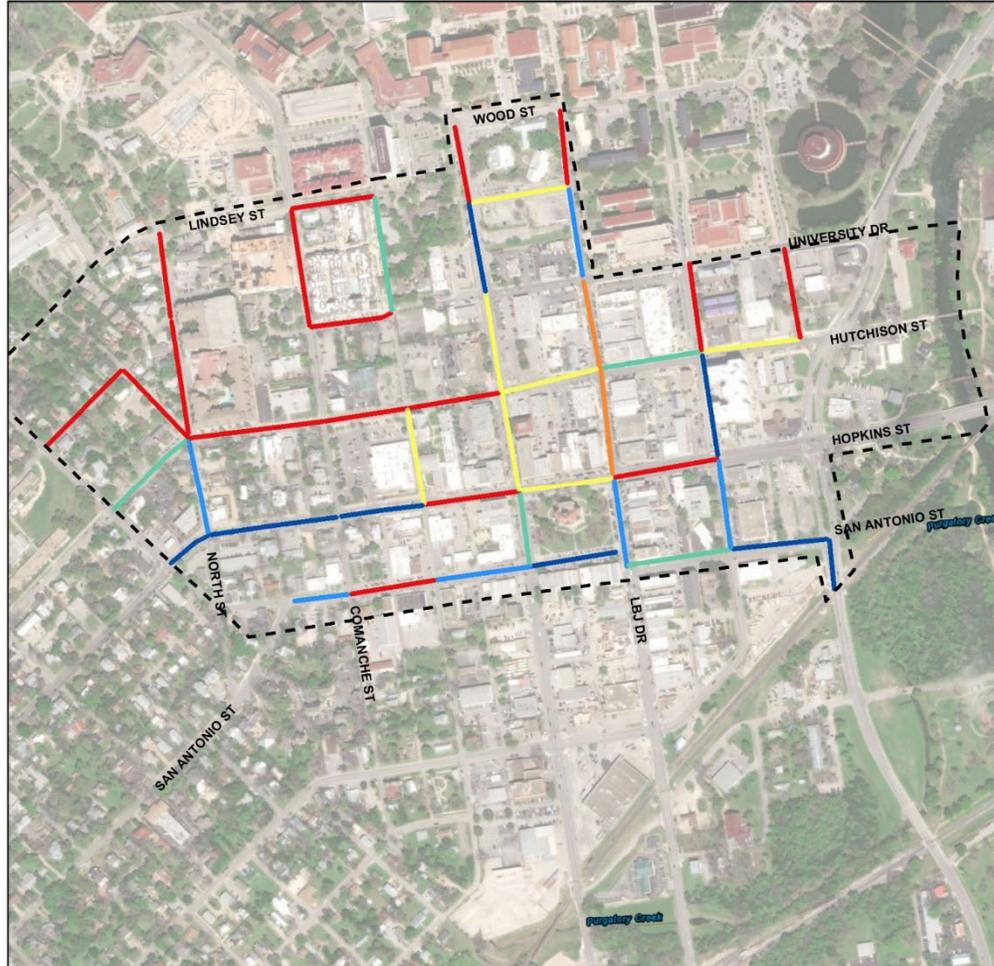


**Downtown San Marcos**  
*On-Street Parking  
 Occupancy Survey*  
 September 12, 2018

**Legend**

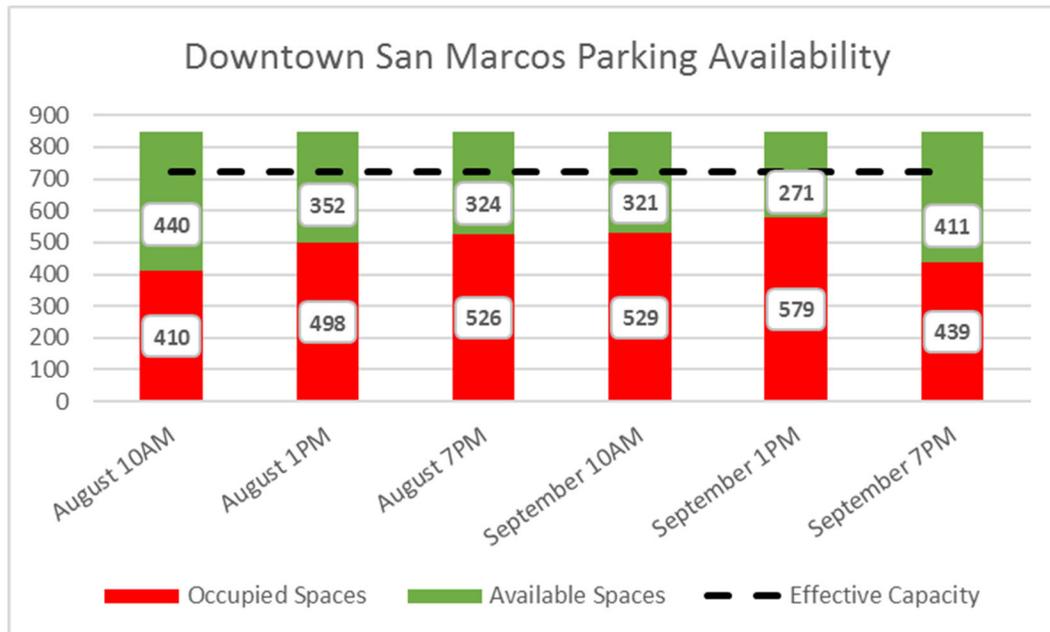
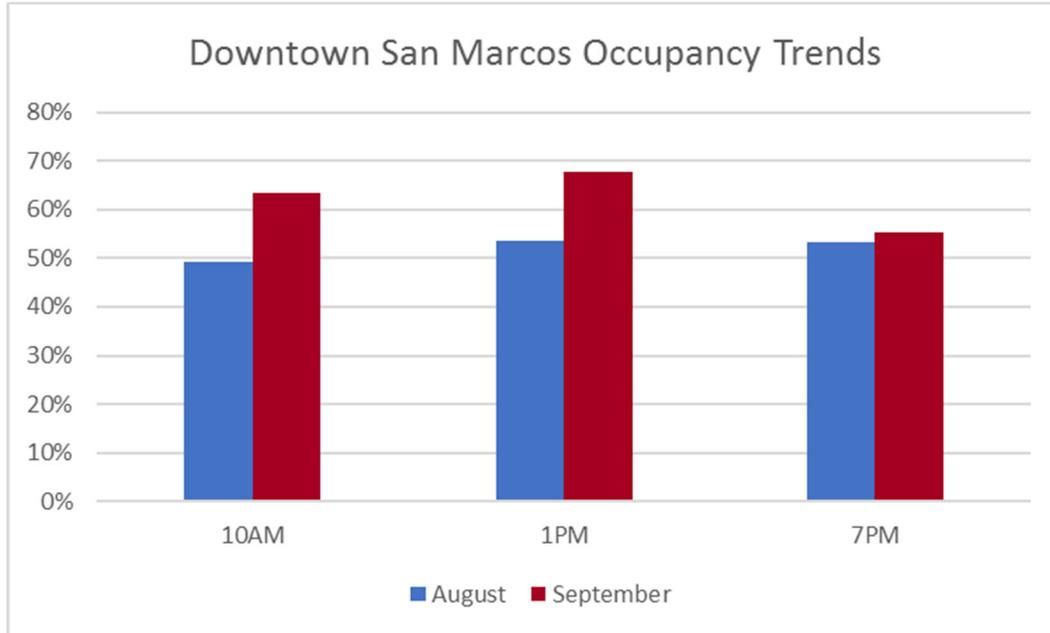
- Study Area Boundary
- Parking Occupancy (1 PM)**
- 0 - 25 %
- 25 - 50 %
- 50 - 75 %
- 75 - 85 %
- 85 - 90 %
- 90+ %

Total On-Street Parking - 722 Spaces  
 Study Area Avg Occupancy (1 PM) - 74%





The graphs below summarize the results of the parking occupancy data collection efforts:





This data indicates an overall peak study area occupancy of 70 percent. During the peak hour (1 pm) a total of 19 blocks were observed to have occupancies over the 85 percent threshold, for a total of 42 percent of the overall study area (302 spaces of the total 722 spaces). The data also suggests that Texas State students are adding approximately 13% additional parking demand in the defined downtown study area (compared to counts done during the Summer). This equates to an additional parking demand of over 85 additional on-street spaces taken up daily in the downtown core area (most likely by students).

### *On-Street Parking Turnover Analysis*

A key metric for assessing on-street parking conditions is the “Turn-Over Rate” (the number of vehicles parking in a single spot during a typical day). This data was generated by a manual count of selected spaces in the San Marcos downtown area.

Turnover rate:

- Area: Hopkins St. from Guadalupe to LBL
  - 50 vehicles in 16 spaces
  - Average space turnover: 3.125
  
- Area: LBJ St. from San Antonio to Hutchinson St.
  - 174 vehicles in 81 spaces
  - Average space turnover: 2.14
  
- Total:
  - 224 vehicles in 97 spaces
  - Average space turnover: 2.30

An ideal turnover for downtown on-street spaces is between 5 and 7 turns per day. The average space turnover observed in downtown San Marcos is far below the ideal turnover rate for a high-performing commercial and retail destination, with significant consequences for local business and property owners, as well as the City.

### *Violation Rate Data Analysis*

Another key metric for assessing on-street parking conditions is the “Violation Rate” (the number of vehicles in violation of posted time limits). This data was generated by San Marcos PD using the NuPark MLPR system.

Violation rate:

- Based on data collected from 8/1/2018 - 9/28/2018 (over 10,589 LPR “plate reads”), the number of vehicles exceeding the time limits was 985 or an average of 24 per day. This equates to a statistically high violation rate of approximately 10%.
- A target violation rate is typically in the 3% - 5% range.
- Annualized, for just the study area, this would equate to approximately 8,760 violations per year.



#### IV. On-Street Paid Parking Assessment

##### *Process Overview*

It is understood that the implementation of on-street paid parking will be a critical funding source for the parking program going forward, however, it should also be well understood that “revenue generation” is not the primary motivating factor for implementing paid on-street parking. The primary motivation for implementing this specific strategy is to better manage the turnover of the City’s valuable and limited on-street parking assets. Reducing longer-term parking in the more convenient on-street spaces (including better managing student use of these parking resources) will create more customer parking for downtown businesses and help stimulate economic activity as well as supporting business attraction and retention.

Another important consideration that the Kimley-Horn consultant team would like to reinforce is the observation that the City has very limited off-street surface parking options in and around the downtown. This lack of mid-to longer term parking options is partially responsible for the longer-term parking that is reducing the desired turnover of on-street spaces. If on-street paid parking is implemented without also addressing the need to provide affordable longer-term parking alternatives for employees, the City runs the risk of creating several unintended consequences such as staffing shortages for downtown businesses, complaints from employees re: the lack of convenient and affordable longer-term parking options, increasing pressure on parking in residential neighborhoods near the downtown, etc.

Having reiterated these important points, the following section discusses several considerations related to planning for on-street paid parking as a key recommendation from the Parking Management Framework Plan.

##### *On-Street Paid Parking Implementation Strategy Goals*

As stated above, the primary objective to implementing on-street paid parking is to better manage the City’s valuable on-street parking resources as a short-term/high turnover customer parking asset to support the success and long-term viability of small businesses in the downtown.

It should be noted that implementation of this strategy has been delayed (from the original recommendation several years ago) as the City has made investments in parking enforcement technology (the new NuPark system) and enhancing parking enforcement technology, policies and practices over the past year in response to City Council direction.

The graphic on the following page places on-street paid parking on to a “spectrum of parking alternatives”. This graphic illustrates that the primary goal of paid on-street parking is the promotion of “turnover” as a means to create greater access to the limited number of on-street parking spaces.



## SPECTRUM OF PARKING ALTERNATIVES

A combination of approaches and strategies is necessary to achieve the vision and objectives for parking and access downtown.

Where do your peer communities and districts fall along the spectrum?

### On-Street Parking Management Strategies



### Off-Street Parking Management Strategies



### Other Strategies to be Considered with On-Street and Garage Parking:

**Expand Enforcement to Evening and Weekends.**

**Manage Employee Parking**  
Options/incentives to move employees off-street.

**Residential Parking Permit Program**  
Reduce spillover impact on neighborhoods.

**Enhanced Communication, Education and Wayfinding**

• Help customers find parking quickly

• Mobile apps

**Alternative Funding Options**

• Parking districts

• Impact fees

**Transportation Circulation Options**

• Circular shuttle

• Bike share

**Increase Supply**

• Parking garages

• Surface lots

**Park & Ride**

• Max





## *Paid Parking Assessment Criteria and Evaluation Process*

The management of on-street parking is typically comprised of four basic strategies where the degree of regulation depends on the magnitude of the on-street parking problem. These parking control measures start at the simplest level of regulation which is free/unrestricted parking, and then the degree of control is increased to installing signage to regulate the duration of stay to a specific time period (and other use restrictions such as loading zones, valet parking, ADA parking, etc.) paid-parking (single-space meters or multi-space machines) with specific time limits, and lastly parking bans (peak hour or all day).

Over the years, it has been found that installing on-street paid-parking is demonstrably the most efficient and flexible way to manage on-street parking demand. However, posted 1- or 2-hour time limits represent the most common parking management measures. Numerous studies show that signed time limits produce longer stays, lower turnover, and block faces that are close to 100 percent occupied. Areas with posted time-limits frequently suffer from double parking and additional cruising by motorists striving to find a vacant space.

The significant factors or criteria used in assessing the need to install on-street paid-parking are:

- The extent of parking demand;
- The proportion of overtime parkers and the amount of available time used by them;
- The average parking duration of these violators; and
- Parking space turnover.

Thus, as the on-street parking management problem escalates, parking planners have had to resort to using the economic incentives to encourage turnover and to mitigate against “over-stay” parkers.

The Parking Handbook for Small Communities and other resources note the following reasons for installing parking meters:

- Promote parking turnover;
- Distribute limited on-street parking time equitably;
- Provide space for the short-term shopper and business clients;
- Maximize the economic viability of the downtown by providing opportunities for more people to park conveniently; and
- Generate revenue for the municipality<sup>1</sup>.

Initially the parking meter was developed to regulate the parking of motor vehicles; however, it also aids in the enforcement of duration of stay restrictions. Parking meters simplify and reduce the cost of enforcement up to one-third to one-fourth the time normally required for signed time-limit regulations. The process of initiating the paid-parking device and establishing the desired duration of stay seems to create in the person parking a greater awareness of the expected ending of the parking session, as compared to stopping at a curb with signed parking duration restrictions.

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1. Edwards, John D., "The Parking Handbook for Small Communities; National Main Street Centre and the Institute of Transportation Engineers, 1994.



## *Factors to Consider When Implementing Paid-Parking*

The following is a framework for the installation of on-street paid-parking to assist parking and city planners in developing curb spaces that enhance the parking supply in a defined study area. The development of this defined process to document and justify the need for implementation of on-street paid parking is based on the following major considerations:

- The parking meter/multi-space parking control device is considered a traffic control device whereby an economic incentive is used to encourage turnover and to limit over-stay parkers.
- The installation of on-street paid parking in a specific area may divert some of the current parking demand to adjacent blocks where free parking exists.

More than 30 potential factors that might need to be evaluated when a municipality considers implementing pay-parking in an area of a city were assessed and ranked by a number of planners and parking professionals. The respondents were asked to rate the various factors. Based on this review, the most important factors to be considered when installing paid-parking include:

- On-street paid parking is appropriate in Central Business District locations or where the land use is an entertainment or a medium to high density residential district;
- On-street paid parking is appropriate at locations where the over-stay parking time limits measures 30 percent or higher, and the peak parking occupancy on a significant number of block faces are in excess of 85 percent occurs for three or more hours;
- On-street paid parking is appropriate in areas subject to overflow parking due to nearby high traffic generators- sports facilities, shopping centers, universities/colleges, etc.;
- On-street paid parking would typically be installed where there are complaints from local business persons or residents, and when the proposed parking mitigation measure is supported by a majority of those local businesses;
- On-street paid parking would typically be installed where there are signed parking duration restrictions, where on-street paid-parking exists in adjacent blocks, or where paid-parking exists in nearby off-street parking lots; and
- Sustainable transportation solutions are important considerations when implementing on-street paid parking, such as minimizing motorists that are circulating through the area trying to find a vacant parking stall, as the parking control measure will serve to encourage use of alternate modes of transportation or improve quality-of-life in the adjacent residential area(s).



### *A Defined Process for Implementing On-Street Paid Parking*

The key criteria for determining whether on-street paid parking should be implemented in some sector of an urban area is that there must be an identified parking problem resulting in the need to reduce overtime parking and double parking; to increase parking turnover; to address spillover issues from a large parking demand generator, to reduce excessive area traffic; and to simply make parking more available for downtown merchants and businesses. The creation of the following defined process for assessing the installation of curbside paid parking is based on parking space usage characteristics as typically generated by vehicle license plate surveys of parking occupancy, duration of stay, and turnover.

### *On-Street Paid Parking Assessment Criteria*

This on-street paid parking assessment criteria was developed to provide a simple set of objectives and technical criteria based on locally relevant data as a starting point for assessing the appropriateness of implementing on-street paid parking as a tool to address specific parking issues in a defined area.

The checklist process provided in Table 1 on the following page is used to assess the appropriateness of paid on-street parking in an urban environment. The checklist consists of five subject headings:

1. Land use;
2. Amount of overstay parking;
3. Parking occupancy;
4. Size of the parking management problem area; and
5. Adjacency of nearby parking management measures.

The assessment procedure considers 27 factors and the paid-parking justification threshold is 100 points. That is to say, if the values for the various factors combined exceed the minimum 100-point threshold, paid parking is considered appropriate from a technical criteria perspective. Based on this analysis, San Marcos meets the minimum criteria for implementing on-street paid parking.



Table 1. On-Street Paid Parking Assessment Criteria

On-Street Pay-Parking Warrant Factors		Rating	Score
1.	<b>Land use in the study area or block face</b>		<b>30</b>
	1.1 CBD commercial	30	
	1.2 Entertainment district (theatres / museums /restaurants / etc.)	25	
	1.3 Destination-type shopping precinct	20	
	1.4 Suburban retail precinct/block	20	
	1.5 Suburban pass-by strip commercial area / block	15	
	1.6 Suburban office commercial area/block	20	
	1.7 Low Density mixed light industrial/retail/office area/block	15	
	1.8 Medium/high density residential area / block	20	
	1.9 Mostly single-family residential area/block	15	
2.	<b>Amount of Overstay Parking - parking longer than the designated time limit</b>		<b>20</b>
	2.1 Up to 10 percent	5	
	2.2 11 to 15 percent	10	
	2.3 16 to 20 percent	15	
	2.4 21 to 25 percent	20	
	2.5 26 to 30 percent	25	
	2.6 31 percent or higher non-compliance levels	30	
3.	<b>Parking Occupancy-</b>		<b>10</b>
	3.1 Peak occupancy of 75 to 84 percent occurred for one hour	5	
	3.2 Peak occupancy of 75 to 84 percent occurred for two hours	10	
	3.3 Peak occupancy was 85 percent or greater for one hour, or 75 to 84 percent occurred for three hours	15	
	3.4 Peak occupancy of 85 percent occurred for two consecutive hours, or four times during study period.	20	
	3.5 Peak occupancy of 85 percent occurred for three consecutive hours or six different times, or higher levels of parking demand	25	
4.	<b>Area of significant parking influence- size of parking management problem area</b>		<b>25</b>
	4.1 Single block face	15	
	4.2 Two to four blocks	20	
	4.3 Five to eight blocks	25	
	4.4 "Donut" area surrounding the high traffic generator	25	
5.	<b>Adjacency of nearby parking management measures</b>		<b>15</b>
	5.1 Signed parking limits	15	
	5.2 Curbside paid-parking	25	
	5.3 Presence of paid-parking in off-street parking facilities	20	
<b>Total Points</b>			<b>100</b>



## Recommended On-Street Paid Parking Locations and Quantities

Based on the parking data analysis, the objective “On-Street Paid Parking Assessment Criteria”, our understanding of the parking dynamics in downtown San Marcos, and best practices in implementing paid parking in urban environments, the map below illustrates the recommended area for on-street paid parking in downtown San Marcos.

This proposed paid parking area contains approximately 425 spaces and focuses on the CBD area and the surrounding areas most heavily used by Texas State University students.



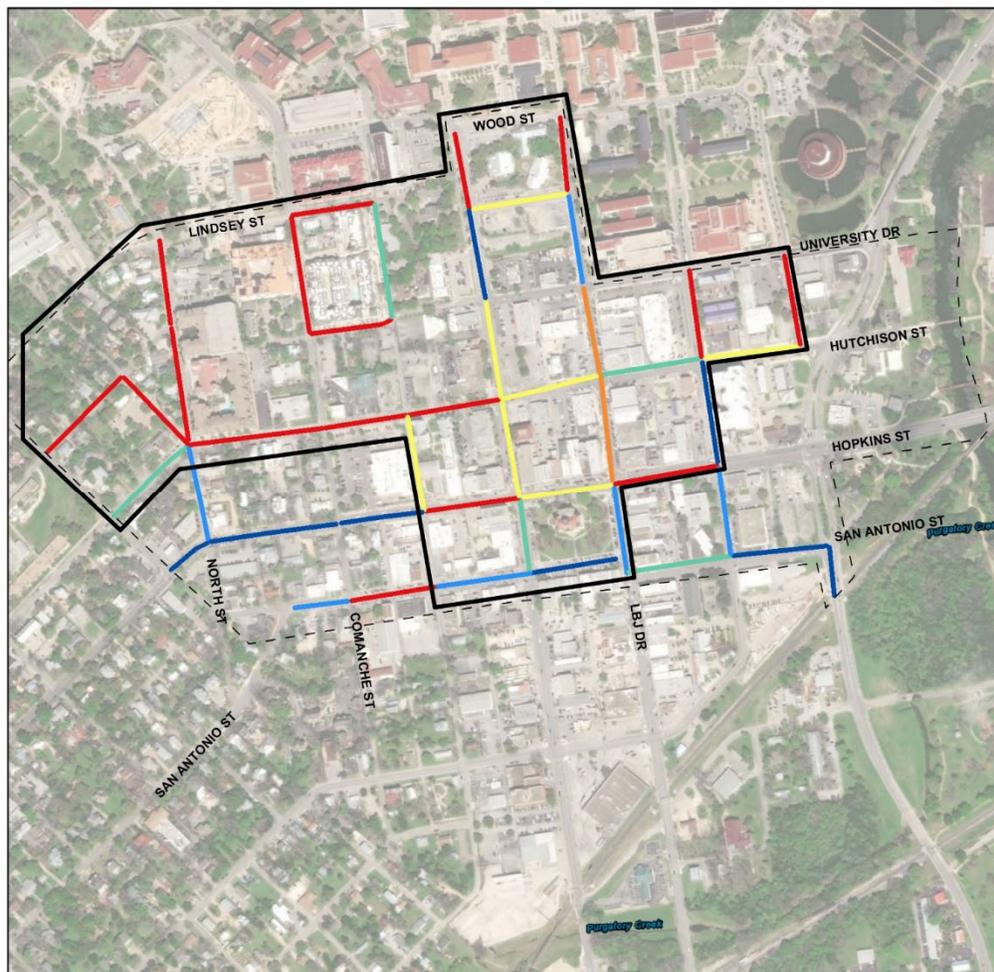
### Downtown San Marcos

Proposed Paid Parking Boundaries

#### Legend

- Proposed Paid Parking
- Study Area Boundary
- Parking Occupancy (1 PM)**
- 0 - 25 %
- 25 - 50 %
- 50 - 75 %
- 75 - 85 %
- 85 - 90 %
- 90+ %

Total On-Street Parking - 722 Spaces  
Study Area Avg Occupancy (1 PM) - 74%





## *A Phased Approach*

A phased approach to implementing paid parking in San Marcos is recommended. Phase one recommends on-street paid parking for approximately 425 of the most heavily utilized spaces between San Antonio St. and the Texas State campus. Overall occupancy in this area is approximately 85%, with 14 blocks seeing a demand greater than 90%.

It is recommended that the On-Street paid parking program initially be implemented on week days (M - F) beginning at 9:00 AM and running through 6:00 PM in the area specified in the map on the previous page. It is further recommended that the 2-hour time limits be retained. In order to cover the new technology and communications costs, parking rates will need to be at least \$1.00 / hr.

Once the initial phase has implemented, on-going parking occupancy, turnover and violation rate data should continue to be collected on a periodic basis. Once the key metrics indicate that the thresholds for paid parking have been met, on-street paid parking for the approximately 400 remaining spaces between San Antonio St. and railroad tracks (Comal St.) should be considered. The same days, hours and hourly rates as the Phase One area should be continued, however, given the more remote location of these spaces, extended time limits (up to 10 hours) should be considered to accommodate longer-term visitors and downtown employees.

## *Additional Operational Recommendations*

- Paid On-Street Parking Hours: Monday – Friday, 9:00 AM – 6:00 PM
- Time Limits: Retain two-hour time limits in the paid parking area(s).
- Rates – Recommend initial rate for the Phase I area is \$1.00 per hour. It is also recommended to grant authority to staff (City Manager or designee), with oversight from the Parking Advisory Board, to set paid hours, time limits, and rates (ordinance should provide flexibility by authorizing a range of acceptable paid hours, time limits and rates).
- Under this approach the Council should define an authorized a rate ceiling for on-street parking hourly rates. A rate range of \$1.00 minimum up to \$3.00 maximum is recommended. Increases can be made in increments of \$0.25/hr. Criteria should be developed to justify rate increases based on on-going utilization analyses.
- Phased expansion of the paid parking system: On-going utilization studies of high demand parking areas is recommended utilizing the NuPark system. Utilize the on-street parking “warrant procedure” as the primary tool for assessing on-street expansion going forward.
- Consider creating defined parking “zones” within the paid parking area to facilitate pay-by-cell phone applications.
- It is also recommended to amend the existing Residential Parking Permit system policies and procedures to reflect and integrate the new LPR system into the program guidelines. With the implementation paid parking in the downtown area, this program to protect residential areas will become more important in the future and may require additional parking enforcement resources going forward.
- Consider creating on-street permits in lower demand areas surrounding downtown (City lease off-street space for monthly permits + designate 10-hour zones at downtown edge) to



accommodate employee parking in the short-term until additional off-street parking resources are developed.

*Recommended Timeline for Implementing On-Street Paid Parking*

In preparing for the procurement of on-street parking technology/equipment and installation, it is important to have an overview of the project implementation timeline in mind along with key implementation milestones.

Please note that the timeline provided in Table 2 on the next page is a guideline, and should be adjusted to meet specific needs of individual projects.



Table 2. Recommended On-Street Paid Parking Implementation Timeline

<b>Nine Months Out</b>
Research and analyze existing parking operations
Evaluate equipment and supplier options
<b>Six Months Out</b>
Select a vendor for implementation and order equipment
Develop potential questions and concerns to address
Develop key messages for your project communications plan
Develop a project specific communications strategy
<b>Three Months Out</b>
Apply key messages in all communications
Create and post advance notification/warning signs
Issue press releases and launch informational web-site
<b>One Month Out</b>
Issue follow-up press release
Organize staff so that all media calls and interviews go through one person
Meters installed and tested (Keep meters covered until the actual “go-live date” to avoid confusion)
Just prior to “going live”, post all appropriate signage, (keep the signs covered until the actual “go-live date” to avoid confusion)
Develop policies related to enforcement during the initial launch of the new meters (many communities choose to waive any meter citations for the first week or two of new technology implementation)
<b>Go-Live Day</b>
Remove covers from meters/signs prior to “going live”
Have staff on-hand as needed to explain how the new meters work and answer questions
Have a manager ready to handle any media coverage that may occur
<b>Go-Live - First Week</b>
Keep staff on-hand as needed to explain new meters
Have a manager ready to handle any media coverage that may occur
<b>Go-Live – First Month</b>
Keep staff on-hand as needed
Conduct communications evaluation
Evaluate program and make needed changes



*Estimated Paid Parking Revenue and Capital Expense Projections*

The spreadsheet model below provides a methodology for estimating potential revenues from on-street parking. The model is built on a number of defined factors with defined variables/assumptions. Key model factors include:

- Number of spaces to be metered
- Number of hours per day the meters will be active
- Number of days per week the meters will be active
- Number of weeks per year the meters will be active
- The hourly rate for paid parking
- And an estimated “utilization factor”

In the case of the model developed for San Marcos (see the model on the following page), approximately 425 spaces are recommended for metering at a rate of \$1.00 per hour with an estimated utilization factor of 60%. This would generate a projected annual revenue of approximately \$585,225.00.

The capital costs for the equipment, including system testing, commissioning, installation and training are estimated at approximately \$600,188.00. This would leave a year one operating result of -\$15,000.00. Year two projected net revenues are estimated at approximately \$471,000.00. This a rough calculation factoring in estimated parking program staffing/operations costs.

Note: This report does not represent a comprehensive financial feasibility study. The likelihood of success for this project has not been determined by Kimley-Horn and was not a part of the scope of services for this study. Kimley-Horn cannot guarantee that the revenue or expense projections contained in this report will be realized, as actual performance will be determined by many factors including the final commercial/retail mix of the development, price and demand fluctuations in the market, development timetables and occupancies, managerial decisions made by the client and/or the project developer, and other political decisions made by local, state, and national government officials.



**City of San Marcos**  
**Preliminary On-Street Meter Revenue Projection Model**  
 \$1.00 per Hour Rate

Factors	Variables / Assumptions	Description
Enter number of metered spaces:	425	Number of on-street spaces within the "Downtown Business District" area.
Enter # of hrs/day .....	9	Assumes meters enforced 9am to 6 pm. Change to fit enforcement hours/days.
Enter # of days per week.....:	5	Assumes Monday through Friday. Saturday is usually a separate calculation since utilization is different.
# of weeks per year meters paid :	51	Allows up to 7 holidays that meters are not enforced per year.
Enter the hourly rate in \$ per hour:	\$ 1.00	The amount charged per hour in dollars or decimal portion thereof.
Utilization factor .....	0.6	A decimal portion between 0 and 1 that indicates the usage of the aggregate meter spaces. High levels of usage will be 0.85 to 1.0, low levels would be 0.10 to 0.35. 0.45 matches current documented utilization.
<b>Projected Annual Meter Revenue:</b>	<b>\$ 585,225</b>	

NOTES:

It is recommended that meters be grouped into areas of similar usage. These groups should also be used to define collection routes or groups. Tracking revenue and comparing actual to projected will help define changes to the utilization factor so that revenue forecasts can be as accurate as possible.

Please be aware that evening and weekend utilization will be different than weekday factors. A revenue projection for a single group of meters may require 2 or 3 calculations to arrive at an accurate revenue projection for all time frames.

Number of controlled spaces	425	Number of on-street spaces within the "Downtown Business District" area.
Number of spaces controlled/device:	8	Assumes multi-space meters with solar panels.
Number of meter mechanisms:	53.125	Total number of spaces divided by the number of spaces each device will control.
Cost of each mechanism:	\$ 9,500	Cost of each device including shipping and handling.
<b>Projected Equipment Capital Cost:</b>	<b>\$ 504,688</b>	Total projected capital equipment cost.
	\$ 85,500	Installation, testing and commissioning
	\$ 10,000	System configuration and training.
<b>Projected Year One Net Revenue</b>	<b>\$ (14,963)</b>	Projected year one net revenue after deduction of capital cost, installation and training.
<b>Projected Year Two Net Revenue</b>	<b>\$ 471,000.00</b>	Projected year two net revenue after system capital cost, installation and training have been paid. NOTE: Includes a deduction of approximately \$114,000 annually for estimated parking program staffing/operations costs.

Variable Inputs - Changed values will update totals.



### *Parking Technology*

In July 2016 Kimley-Horn provided the City with a “white paper” on the topic of On-Street Parking Technology Options. This document provides a detailed overview of current on-street parking technology options.

Kimley-Horn recommends that the City invest in a multi-space parking meter system that can support a “pay-by-license plate” methodology. The pay-by license plate methodology has been gaining in popularity and market share in the past several years and should integrate well into the Nu-Park System and mobile license plate technology recently purchased by the City. It is also recommended that the City invest in a Pay-by Cell phone parking application option.

It is understood that the City will likely make any desired on-street parking technology system purchase through “Buy-Board” or some other collaborative purchasing agreement. The on-street parking technology system specification provided under separate cover should be reviewed and modified to meet the needs of the City and used to inform any technology procurement process.

### *Parking Technology Recommendations*

- Invest in a multi-space parking meter system that supports “pay-by-license plate” methodology.
- Invest in Pay-by Cell mobile parking application.

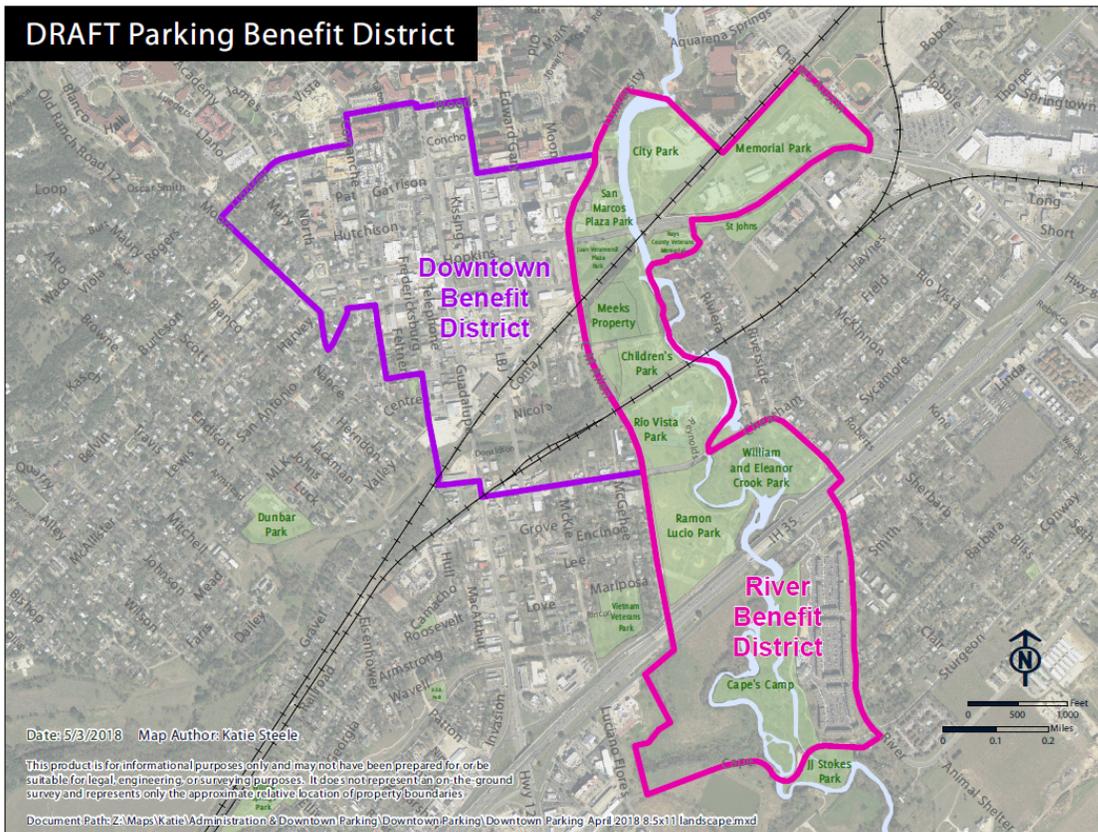
Initial Revenue & Capital Cost Estimates indicate an approximately one-year payback period for the City’s initial investment in parking technology. That is to say, the cost of purchase and installation of parking technology should be roughly equal to the amount of parking revenue generated in the first year of operation.



**V. Parking Benefit Districts**

Primary Action Item # 6 from the Parking Management Framework Plan recommends the creation of "Parking Benefit Districts" to encourage support for implementing on-street paid parking by dedicating a percent of net on-street meter revenue back to the districts in which they were generated. An ordinance should be developed to define the specific terms and conditions for the use of these funds and who controls their disbursement.

As illustrated in the map below, the City is considering the possibility of creating two parking benefit districts, one for the downtown core area and a second one related to recreational parking resources adjacent to the San Marcos River.



*Parking Benefit Districts Defined*

A “parking benefit district” is a quasi-government organization, usually a public-private partnership with local business participation, that has some authority over parking rules and revenues. It uses those revenues to enhance the district in a variety of ways. In some cities, these districts are known as transportation benefit districts; in others, existing downtown development authorities (DDAs) or business improvement districts (BIDs) serve many of the same functions. In fact, a neighborhood doesn’t even need a special-purpose “district” designation to enhance parking convenience, as long as businesses and the municipality cooperate on charging for parking and improving the commercial, residential and retail environments.



## *How Parking Benefit Districts Work*

A Parking Benefit District (PBD) is designed to improve availability of on-street parking while promoting walking, cycling and transit use. A PBD allows the City to establish boundaries extending out from a metered area and dedicate a portion of the revenue raised for specified improvements within the defined boundaries.

The PBD dedicates a portion of the district generated parking revenues, less City expenses (purchase and installation of meter or pay station, credit card processing charge, back office support and state sales tax, etc.), to local improvements that promote walking, cycling and transit use, such as sidewalks, curb ramps, lights and bicycle lanes. Typically, a board or commission is established govern the district and guide the use and allocation of the parking revenues based on ordinance provided guidance on the type of expenditures that are allowed. Typically, the use of these funds is restricted to district enhancements (sidewalk improvements, area beautification projects, other parking enhancements, safety improvements or support for alternative transportation initiatives (bike or scooter programs for example).

Charging for parking and promoting other transportation alternatives can help reduce single occupant vehicle miles traveled. The PBD will benefit from those who still choose to park and pay the meter. The closest PBD to San Marcos is in Austin in the West Campus Neighborhood.

## *Case Studies and Current Best Practices*

### *Ann Arbor, Michigan*

Businesses in Ann Arbor, Michigan, used to hear daily complaints from residents that there wasn't enough parking downtown. The Ann Arbor Downtown Development Authority tackled this problem by making it easier for drivers to find garage parking and by making street parking more expensive and limiting it to short-term stays. Susan Pollay, the DDA's executive director, says that from the outset the board decided that both on-street and off-street parking should pay for itself, and that a good public parking "product" should cover its costs as well as help pay for other ways of getting downtown.

To encourage drivers to use garages, the DDA put up signs directing them to the nearest garage. It also installed electronic signs at the entrances to six garages that show how many empty spaces are available inside. Because street parking now costs more than garage parking, street spaces are likely to be available most of the time. As a result, customers spend less time "cruising" and looking for a space.

Pollay reports that "Ann Arbor's perception that there was not enough parking is now almost completely gone." This is true even though the city's downtown zoning does not generally require developers and tenants to provide parking. The DDA's parking profits have helped pay for commuter bus passes, supplemental transit service, bike parking and bike shelters, car-share spaces, electric car-charging stations and a late-night shared cab program. Most of these reduce the need for parking, so the DDA's parking program also operates as a successful parking demand management program.



### Old Pasadena, California

One pioneering example of a parking benefit district is Old Pasadena. In the 1990s, the city and downtown merchants reached “one of the smartest political and parking solutions of the last 25 years,” according to one consultant. The solution shifted the consensus from “charging for parking will scare away our customers” to “meter revenues will dramatically improve the retail and pedestrian streetscape.” Old Pasadena added meters, raised street parking prices high enough that short-term customers could always find a space, allowed businesses to make modest cash payments in lieu and provided off-street parking in city-owned garages. Pasadena manages the parking benefit district by means of agreements among the city, the BID and a Parking Management Zone advisory committee.

Revenue from the meters helps fund sidewalk improvements, facade restorations, trees and tree grates, traditional light fixtures, public safety and downtown promotion efforts. Retail sales in Old Pasadena increased 900 percent in nine years. Schreiber says that “for a first-time customer, being able to feel comfortable in a streetscape, see an attractive storefront and park close to it is everything. This is especially true for restaurants. ... Parking has to be priced at a level that ensures there will be a short-term space [nearby]. Once the customers come in and become fans, the next time they’ll happily park in the garage and stay longer.”

### Haverhill, Massachusetts

Haverhill was trying to attract more residents and businesses to its downtown, so the city decided to add a parking garage. Consultants pointed out to Haverhill that the proposed garage was surrounded by free street parking spaces. William Pillsbury, Haverhill’s Director of Economic Development and Planning, says that “the city was opposed to paid street parking at first, but we eventually realized that bringing back paid on-street parking — after a free-parking policy that lasted 50 years — would encourage use of the garage (and help pay for it) and help keep a reasonable number of street spaces open. Our restaurants were clamoring for more convenient street parking in the evenings, so our paid street parking now extends to 8 p.m. to make sure spaces turn over. This has been very helpful to the restaurants.” The city plans to use some of the parking revenue to “spruce up the sidewalks and streets,” explains Pillsbury, adding that “we understood early on that a paid parking strategy would help both restaurants and other businesses.”

There is plenty of evidence that market pricing for street parking enhances convenience for shoppers, makes retail locations more accessible and provides nontax funds to enhance the retail environment as well as the overall streetscape. For retail, office and residential developers, investors and business owners, parking benefit districts offer a chance to do good and do well, as well as an opportunity for leadership.

### Other Best Practices

Since the purpose of parking benefit districts is to provide local benefits, most districts help pay to improve and maintain sidewalks and streets as well as to improve and restore storefronts. Because these districts serve as catalysts for business and real estate investment without using tax revenues, they can experience bipartisan support. They can also charge nonresidents market rates for street parking and use some of the money to fund free or low-cost parking for residents,



creating further political support. For most new parking policies to be a success, a single authority or district must administer both on-street and off-street parking so it can approach problems strategically.

### *Advantages of Parking Benefit Districts*

Parking benefit districts can provide a wide range of benefits to commercial real estate developers, property owners, business owners, employees, residents and shoppers. Parking benefit districts can also create revenue to pay for a variety of district improvements, in addition to the provision of more and/or more convenient parking, including the following:

- Sidewalk cleaning and repairs.
- Sidewalk furniture (planters, benches, bike racks, banners, wayfinding signs, traditional streetlights).
- Restriping streets and crosswalks for pedestrian safety, more parking spaces and/or bike lanes.
- Reducing the number of curb cuts to enhance walkability.
- Installing and landscaping safety islands, medians and other traffic-calming devices, raised crosswalks and sidewalks.
- Transit and commuter bus passes.
- Bike-share programs and bicycle parking.
- Car-share parking spaces.
- Electric car-charging stations.
- Programs that offer late-night and emergency mid-day cab rides home for transit riders and others.

### *Parking Benefit Districts Recommendations*

- Establish Parking Benefit Districts, a “Downtown Benefit District” and a “River Benefit District,” to encourage support for on-street paid parking by dedicating a percentage of net meter revenue back to the areas it was generated.
- 30% / 70% revenue split with 30% dedicated to the Parking Benefit Districts and 70% remaining within the Parking Management Fund.
- Council appointed Parking Advisory Board oversees distribution of funds.
- Specific terms and conditions for the use of these funds, and who controls their disbursement, should be established by Ordinance.
- Common Parking Benefit District expenditures include sidewalk/walkability improvements, district beautification, and transportation or parking investments.