

**PARKING
AND PUBLIC IMPROVEMENTS
COMMISSION**

09/26/2019

**Late Comments and Attachments
Received**

After Agenda Posting

Erik Zandvliet

From: Fred Koerber <fkoerberjr@yahoo.com>
Sent: Wednesday, September 25, 2019 10:10 AM
To: Erik Zandvliet
Subject: West Marine Traffic Management Plan

Good afternoon,

I recently received your Public Meeting notice regarding traffic calming measures. While I'm a proponent of safety and would not discourage the city from implementing plans to make things safer, I get the suspicion that this is just a case of "whoever is yelling the loudest." I seem to find red painted curbs, restrictions on left turns, restrictions on parking and restrictions on times on travel direction frequently implemented in obscure places only to appease residents rather than actually benefit the community. The reality is every thoroughfare is a major artery these days. We need all the routes we can get given the traffic problems. I happen to live on Valley Drive, so am used to our street being utilized as a major thoroughfare. My complaint regarding this hearing is the City has done nothing about the excessive speeding and the frequent running of the stop sign at Blanche / Valley. You seem to turn a blind eye to what is inherently obvious to anyone who lives here and appear "jump" whenever asked by residents in these otherwise non-congested areas who simply are just irritated by bad driving or people parking in front of their house.

If you want to save a life (and increase revenues), put a policeman at the corner of Valley and Blanche 24/7. I've yet to see anyone properly stop at that stop sign and most just ignore it altogether. My request is that you focus your energy and resources (both money and people) on more obvious problems. Thank you for your consideration.

Fred

Erik Zandvliet

From: Andy Jurkowski <ajurkows@yahoo.com>
Sent: Wednesday, September 25, 2019 7:04 AM
To: Erik Zandvliet
Subject: Fwd: Feedback on traffic project

Erik,

I'm not able to attend the meeting tonight given work obligations. However, I did want to provide you some feedback. Please share with the committee.

The traffic measures implemented have had a minor positive impact, but the core issue remains - given the explosion of waze and similar mapping apps, there is too much cut through traffic on this stretch of marine and the street can't handle it safely (and valley can). I strongly suggest you trial blocking off marine where Agnes intersects with it (west side of intersection) to prevent cut throughs. This is similar to what's done in other parts of MB such as a few streets that connect to sepulveda. There are plenty of access points - all parties will view this favorably - but to prove it, we need to do a trial. Another option (that is not mutually exclusive) is making the intersection of marine and Blanche one way such that westbound traffic from marine have to turn right onto Blanche rather than being able to go straight and continue on marine. With this option, there is absolutely no negative access impact to MB residents and cut throughs are provided safe passage on valley - everyone wins!

Second, people continue to speed on all parts of marine (from valley all the way to highland). Speed bumps (and/or more stop signs) seem the only way to stop this. On a related note, putting a stop sign at the blind intersection of flournoy and marine is much needed. Of course, all

Third, stop sign enforcement remains an issue on the whole stretch, particularly where marine and 25th meet.

Of course, 2 and 3 are dramatically reduced in importance if we can just deal with the core issue of reducing cut through volume.

-Andy

Sent from my iPhone

Begin forwarded message:

From: Andy Jurkowski <ajurkows@yahoo.com>
Date: September 27, 2017 at 7:01:53 PM PDT
To: Erik Zandvliet <ezandvliet@citymb.info>
Subject: Feedback on traffic project

Erik,

Per our conversation, just putting my feedback in an email:

First, I agree with all of the recommendations you put forward in your write up.

Second, as we discussed, my overriding concern is keeping traffic on streets that are meant to

handle it, thereby reducing cut throughs. In addition to what you put forward, I would suggest:

1. Adding an intersection "bulb" at valley and marine intersection so the right turn from valley onto marine is at a different angle.
2. Breaking up the flow of traffic by blocking off access on the west side of where Agnes meets marine, or reducing that stretch of marine to one way, or at a minimum adding turn restrictions from valley to marine. Similarly, you could also discourage cut throughs by preventing cars from going straight from the 500 block to the 600 of marine by adding some type of restriction (sign with time restrictions or physical barrier)...this way, at least cars turn right and get onto valley via Blanche rather than cutting through marine.
3. Adding speed bumps on all stretches of marine.

Happy to discuss.

Thanks again,
Andy

Sent from my iPhone

Erik Zandvliet

From: Gary Osterhout <garyosterhout@verizon.net>
Sent: Wednesday, September 25, 2019 6:00 PM
To: List - PPIC
Subject: 9/26/19 PPIC Meeting Agenda Items Comments/Concerns

Commissioners:

A few items of comment and concern regarding your Thursday agenda items.

Crosswalk Enhancement

Remember that any crosswalk or crosswalk amenity is a false sense of security.

When I was on PPIC, I was in favor of a flashing in pavement lighted crosswalk at Morningside (which was voted down by the Commission) years before it was approved. That said, I think we have gone overboard with the flashing crosswalk enhancements city-wide particularly in respect to the Rectangular Rapid Flashing Beacons. There is little basis I can see to put these in the residential areas and I would urge an immediate moratorium on such placement, if not removal where already placed. Please consider that if necessary, to restrict the flashing lights to only those lights embedded in the roadway (in-pavement lights).

Further to the above, placing flashing sign poles in the middle of the sidewalk makes it problematic for pedestrians (and especially those pushing strollers). So attention to ADA rules and principles would seem to argue against such placement (even if technically the placement just barely meets tolerances). I see people all the time go into the roadway to avoid these obstacles.

The above also goes to the "speed awareness" signs, that are a placebo at best. They have their uses, but those uses are not in residential areas.

Note that although lighted signs provide additional attention, over time that attention diminishes. But this all adds to light pollution and visual distraction stress. Don't do something just because it looks cool at the moment, or just to say we've done something, or merely because it deploys fancy new technology or justifies the Traffic Engineer's position.

Also in respect to crosswalks, please re-consider the impact on vehicular traffic flow in allowing "on-demand" flashing. The Fishbar crosswalk is almost constantly going during the evening commute, which prevents especially the left turn lane southbound from efficiently moving cars through the short-timed left turn signal, as it is often missed when traffic stops for the crosswalk (or, you could consider increasing the time of the left turn signal, seeing that there is an overabundance of time allowed for east/west traffic on Rosecrans and Highland). I would consider at least some sort of timer on the crosswalk button such that it won't activate for a period of time after the last activation.

To my understanding, Safe Routes to School means that a city identifies the safest routes, and makes the appropriate enhancements to channel students to those routes. It doesn't mean "all possible routes are made equally safe."

Safe crossing and sidewalks are also enhanced when the City proactively identifies when properties have foliage overgrown into the sidewalk area that forces pedestrians onto the street or prevents traffic from best seeing pedestrians. Yet the City only acts when specific overgrowth complaints are made. I would wish you would recommend proactive compliance activities by the City in this area, without prior resident complaint.

Pedestrian ramps should exist at all our crossings--we can use CDBG funds for this without dipping into the \$100K fund (which I would love to see be used for expenditures other than useless bikeway pavement and signage markings).

In respect to signage, excessive signage of all stripes, as well as all advertising methods of attracting motorists' attention, imperil safety. Please stress that in your recommendation that all such distractions should be essential, and that all signage should be annually reviewed for upkeep, aesthetics, and necessity.

Also, I wish someone could e-mail be back about the crosswalk across Valley at Blanche, as to why it is off-center to the Parkway stairs.

Parking Measures on Parkview at Manhattan Beach Studios

I believe that eventually to build a good across-Manhattan Beach bike system, we will need to connect Parkview with Marine Park, continuing an "under Sepulveda" bikeway utilizing Veterans Parkway and the Hobo Bridge (the latter which is part of Phase III of the mall expansion). Might seem fanciful, but I believe is much more practical than putting bikes on Rosecrans in this area, and would connect West M.B. to the Middle School and Polliwog for bicycles (and do more for bikes than putting white lines on the street and signs along the roadway). As such, I would urge not allowing anything in this area that would obstruct such a plan.

New Parking Infrastructure

I am very much in favor of demand pricing for parking spaces. I am also in favor of zone pricing, and dynamic pricing for time of day. Am against allowing additional time to be added to a meter when expiring (i.e., motorist needs to vacate spot)--but as the report says, need to evaluate how much a problem that really is, but certainly against an app that would allow remote time-extension.

Very opposed to a license plate reader system unless data is deleted daily.

Thank you for your consideration and service.

Regards,
Gary Osterhout



MEMORANDUM

To: City of Santa Rosa
From: Nelson\Nygaard Consulting Associates
Date: October 24, 2016
Subject: Best Practices Review

This Memorandum includes best practices and relevant case studies, from a variety of types of cities and towns, which may have experiences and lessons applicable to the development of future parking strategies in Santa Rosa. Topics include progressive pricing, neighborhood parking plans, ambassador parking enforcement programs, station area parking, and parking benefit districts.

PROGRESSIVE PRICING

Progressive parking policies are policies that better manage a city's existing supply of parking. A key component of any progressive parking policy is a concept known as demand-responsive pricing (also known as variable-rate pricing, performance-based pricing, or dynamic pricing). Demand-responsive pricing charges the lowest possible rate that achieves availability targets, better aligning price and demand to ensure there is always an open parking space. Researchers have determined the ideal parking occupancy rate to be around 85%, which leaves roughly one to two spaces available per block so that cars no longer have to circle the block to find parking. To achieve this occupancy rate, cities increase the cost of parking or reduce time limits in areas with occupancy rates higher than 85%, and decrease the cost of parking or increase time limits in areas with occupancy rates lower than 85%.

Various cities throughout the United States have successfully implemented parking policies to better manage the parking supply in their most popular neighborhoods. Below is a list of US cities that have implemented progressive parking policies over the past several years, and the difference in parking availability and average cost before and after their programs were implemented.

Figure 1 Progressive Parking Programs and Results

City	Goals	Scale	Price Change Schedule	Current Price & Regulation Ranges	Results ¹
Berkeley, CA (goBerkeley)	<ul style="list-style-type: none"> Increase transportation options Reduce traffic congestion Cleaner air Easier and more efficient parking Encourage short-term parking at popular "Premium" spaces Attract parkers to less utilized "Value" zones with longer time limits 	<ul style="list-style-type: none"> On-street meters and select City-owned off-street facilities in three neighborhood pilot areas: Downtown, Southside, and Elmwood. 	<ul style="list-style-type: none"> Prices are changed at the blockface level. Prices do not vary by time of day 	<p>Pricing Premium: \$2.00-\$3.25/hr Value: \$2.00</p> <p>Time Limits Premium: 2 to 3 hours Value: 4 to 8 hours</p> <p>Enforcement Hours 9 a.m. – 6 p.m. Mon-Sat</p>	<ul style="list-style-type: none"> Average increase in availability of 8% for short-term parkers "Full" blocks in core area dropped by 12% Visitor satisfaction with "ease of parking" increased by 41% Parking at Value Zones increased by 38%
Los Angeles, CA (Express Park)	<ul style="list-style-type: none"> Reduce time spent on parking Optimize the flow of traffic Reduce air pollution Achieve 10% to 30% availability 	<ul style="list-style-type: none"> 6,000 on-street metered spaces 7,500 City-owned off-street parking spaces at five facilities Recently launched in Westwood near UCLA with 462 spaces 	<ul style="list-style-type: none"> Prices changed at the blockface level. Prices vary by time of day from Monday to Friday in some areas 	<p>Pricing On-street: \$0.50 - \$6.00/hr</p> <p>Time Limits Varies; 15 minutes to 10 hours</p> <p>Enforcement Hours 7 a.m. – 6/8 p.m. Mon-Sat</p>	<ul style="list-style-type: none"> Most recent change increased average rate \$0.04/hr. 84% of spaces had no rate change Average hourly rate since inception has decreased by \$0.19/hr Average hourly rate increase in area added to the program was \$0.21/hr

¹ From program pilot or most recent reporting year.

Best Practices Memo
City of Santa Rosa

<p>San Francisco, CA (SFpark)</p>	<ul style="list-style-type: none"> Reducing traffic by helping drivers find parking Making streets less congested and safer Have at least one parking space available per block 	<ul style="list-style-type: none"> 6,000 on-street metered spaces and 12,250 City-owned off-street spaces in seven pilot districts. 1,200 Port of SF meters. 	<ul style="list-style-type: none"> Prices changed at the blockface level. Prices vary by time of day in some areas 	<p>Pricing On-street: \$0.50 - \$6.25</p> <p>Time Limits 4 hours or no time limit</p> <p>Enforcement Hours 9 a.m. – 6 p.m. Mon-Sat 7 a.m. – 11 p.m. Mon-Sun (Port only)</p>	<ul style="list-style-type: none"> Average hourly rate at meters decreased by \$0.11/hour and average hourly rates at SFpark garages decreased by \$0.42/hour Amount of time that blocks were at 100% capacity decreased by 16% Amount of time to find a space decreased by 43% On-street parking availability increased by 22% during peak periods and 12% during off-peak periods
<p>Seattle, WA (SeaPark)</p>	<ul style="list-style-type: none"> Support neighborhood business districts Improve parking availability for a variety of users Maintain adequate turnover Reduce congestion 	<ul style="list-style-type: none"> Citywide; approximately 12,000 spaces across 31 rate areas 	<ul style="list-style-type: none"> Prices, time limits, and hours of operation are changed at the paid parking area level. Prices vary by time of day in Pioneer Square only at this time. 	<p>Pricing On-street: \$1.00 - \$4.00</p> <p>Time Limits 2, 4, or 10 hours</p> <p>Enforcement Hours 8 a.m. – 6/8 p.m. Mon-Sat</p>	<ul style="list-style-type: none"> Initially, average hourly rate decreased by \$0.50-\$1.00 in 55% of neighborhoods, stayed the same in 27% of neighborhoods, and increased by \$1.00-\$2.00 in 18% of neighborhoods Most recently, average hourly rate stayed the same in 47% of neighborhoods The majority of neighborhoods where hourly rates decreased or stayed the same did not see an increase in occupancy In areas where hourly rate increased, there was a slight reduction in occupancy
<p>Ventura, CA (Downtown Parking District)</p>	<ul style="list-style-type: none"> Increase parking availability Mitigate employees occupying prime downtown shopping spaces for extended periods 	<ul style="list-style-type: none"> 318 of 2,900 on- and off street parking spaces in the downtown area. 	<ul style="list-style-type: none"> Prices are changed at the parking area level, with three rates Prices do not vary by time of day 	<p>Pricing On-street: \$0.50 - \$1.00</p> <p>Time Limits None, at meters. 24 minutes at 48 short-term parking spaces.</p> <p>Enforcement Hours 10 a.m. – 9 p.m. Mon-Sun</p>	<ul style="list-style-type: none"> 16 new businesses opened since 2010 First use of priced curb parking in Ventura Revenue funds streetscape improvements and free Wi-Fi Crime in downtown decreased by 29% in first year

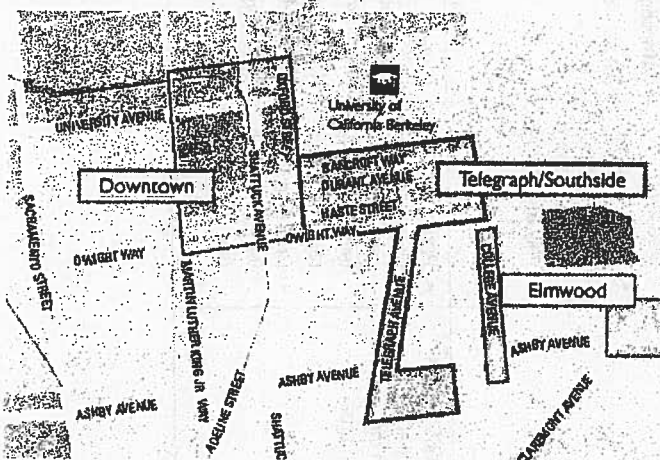
Berkeley, California (goBerkeley)

The goBerkeley program began as a three-year pilot in the City of Berkeley designed to improve the ease of travel within core areas of the city. The objectives of the federally funded pilot program were to explore and test methods of reducing local traffic congestion, improving parking options, and promoting alternatives to private automobiles in Berkeley's commercial areas. In summer of 2013, the City Council authorized adjusting parking rates and time limits at meters, surface lots, and garages in order to achieve parking occupancy rates of 65-85% per block. Changes were made based on existing utilization as presented below:

- Utilization Under 65%: Lower rates and extend time limits to incentivize use of parking
- Utilization 65-85%: No adjustments required
- Utilization over 85%: Increase rates to increase turnover and/or shift demand

The three neighborhoods (Downtown, Southside, and Elmwood) selected for the parking pilot program are highlighted in Figure 2.

Figure 2 goBerkeley Pilot Project Areas



Program Goals

The goal of the parking aspect of the goBerkeley pilot was to reduce parking "anxiety" by making it easier to find parking and negate fears of citations from expired meters. In order to achieve this, the ordinance that established variable pricing zones cited the following objectives:

- Prioritize hourly parking over daily and monthly parking in City garages and move towards the elimination of monthly parking permits
- Improve parking conditions by more efficiently using existing parking and implementing policies to reduce demand for parking
- Manage demand by adjusting parking rates and policies and avoid increasing the supply of parking which may increase automobile use
- Collect parking supply, utilization, and opinion surveys to track progress of improvement plans

Overall the program aims to provide the City of Berkeley with more transportation options, less traffic congestion, cleaner air, and easier and more efficient parking.

Development of Program Goals

With the knowledge of the complexities of the SFpark program in neighboring San Francisco, the City of Berkeley set out to craft a variable-priced parking scheme that met similar goals. However, the City wanted to do it in a more streamlined manner that was administratively and financially feasible for a city of its size. In addition, the City wanted to make the system as easy as possible for users to understand, which could more effectively change travel behavior and maximize benefits to local residents and businesses. In order to do this, the decision was made to forgo the use of sensors, which were deemed too expensive to implement and maintain for the level of accuracy and reliability that they currently offer. The City also chose to set prices based on zones, instead of more complex prices that differentiate by blockface.²

Outreach

In order to conduct thorough public outreach, the City's Office of Economic Development and Public Information Officer were enlisted to convey messages to key business groups and stakeholders. The respective Business Improvement Districts of the three neighborhoods (Downtown Berkeley, Telegraph, and Elmwood) as well as neighborhood associations played a key role in the planning and implementation phases. As variably priced parking is just one element of the goBerkeley program, the outreach and marketing aspects of the program were coupled with other initiatives to promote transportation alternatives. City staff highlighted that door-knocking efforts, required to distribute 1,000 free AC Transit passes as part of the program, provided invaluable face time with the public; helped City staff dissuade concerns about the parking aspects of the program; and increased name recognition of the goBerkeley program.³

Use (and Abuse) of Disabled Placards

Recent statements by Berkeley city officials indicate that the fraudulent use of disabled placards and plates has been a significant problem in Berkeley. According to Berkeley Police Chief Michael K. Meehan, "It's an unfortunate truth, but the abuse of disabled placards is not unusual in Berkeley." In September 2012, Berkeley Police Department Parking Enforcement Officers (PEOs) began to enforce laws related to the fraudulent use of disabled placards. Prior to the passage of Assembly Bill 144 in January 2010, only police officers were allowed to enforce the disabled placard law.

With the implementation of the goBerkeley project, City staff began tracking ADA placard use in metered areas to determine the effect of placard use on parking availability and on the effectiveness of demand-responsive parking policies. Over the course of the pilot project, the City observed that the use of disabled placards increased by 6%. However, as in San Francisco, while disabled placard users occupy most curb parking spaces on some blocks, the demand-based pricing program still succeeded in improving parking availability, as high disabled placard use did not always correspond to high occupancy, and the highest demand streets did not see jumps in disabled placard usage. Placard use in downtown Berkeley and the Telegraph area appears to correlate largely with contextual land uses.

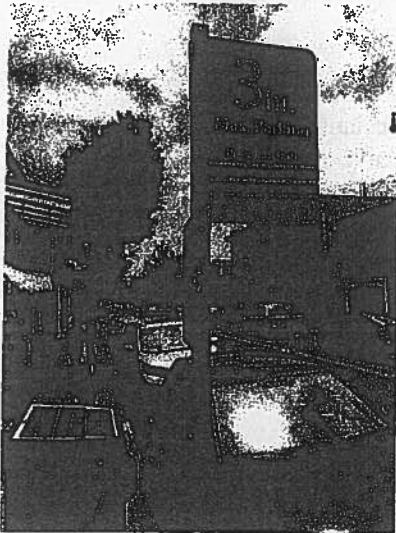
² Ng, Willa, and Nichols, Matthew. Interview with City of Berkeley, February 12, 2015

³ Ng, Willa, and Nichols, Matthew. Interview with City of Berkeley, February 12, 2015.

Technology

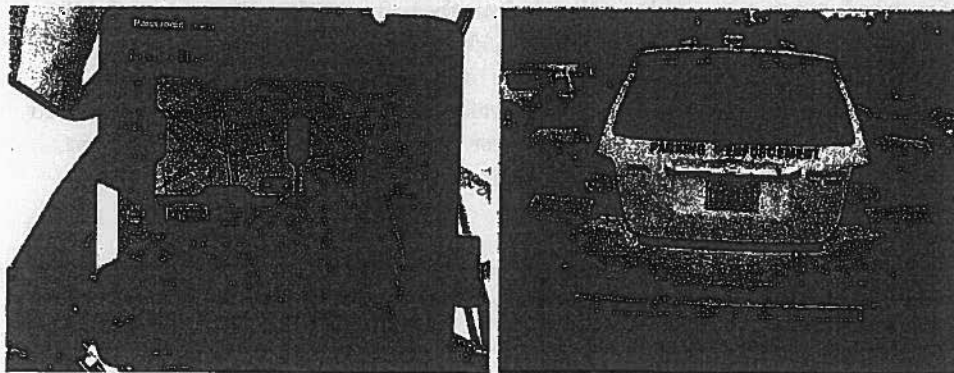
The program was originally implemented by collecting parking occupancy data manually. However, City staff switched to estimating curb parking occupancy data by analyzing transaction data from the area's smart parking meters (Figure 3). To estimate parking occupancy rates on each blockface, transaction data from the meters on each blockface is fed into a software program developed by Xerox. The software estimates parking occupancy rates on each blockface based upon the number of transactions and amount of revenue collected at each parking meter on the blockface. The software then recommends rate changes based on the estimated parking occupancy rates, and the City's adopted policies for the pilot project area.

Figure 3 goBerkeley Smart Meter and Signage



In order to assess the long-term feasibility of demand-responsive parking, the City also tested a variety of other automated data collection and enforcement technologies. This included testing License Plate Recognition (LPR) systems, similar to those already in used in Santa Rosa and cities such as Petaluma and San Francisco, which aid in the collection of parking data, and are also used by many public agencies to identify parking violations, stolen vehicles, and vehicles with multiple outstanding parking violations (which are subject to being towed).

Figure 4 License Plate Recognition (LPR) Technology



Best Practices Memo
City of Santa Rosa

Going forward the program will use occupancy data collected through LPR surveys to calibrate the Xerox software's algorithms for estimating parking occupancy rates based upon parking meter transaction data. Relying solely on transaction data from meters to establish occupancy can be problematic as drivers with disabled placards, as well as a variety of other exempt vehicles (e.g., police and utility company vehicles) can legally park for free. Although the sunk costs of new smart meters and LPR technology are not insignificant, the City expects to save a significant amount of money and time annually on data collection versus manual counts while generating an additional \$1 million per year in citation revenue through improved enforcement.⁴

Price Changes

On the basis of the utilization targets set by the pilot program, parking rates and time limits were adjusted within the study area in fall 2013 and spring 2014. Figure 5 presents the price and time limit changes that occurred throughout the course of the pilot program.

⁴ Ng, Willa, and Nichols, Matthew. Interview with City of Berkeley, February 12, 2015.

Figure 5 GoBerkeley Pilot Project Pricing Adjustments

Neighborhood/ Facility	Regulations	Baseline Rate	Launch Rate (December 2013)	Adjustment Rate (June 2014)	Adjustment Rate (September 2015)	Adjustment Rate (May 2016)	
Elmwood	Parking Rates	\$1.50/hr	1 st hr - \$1.50 2 nd hr - \$2.00 3 rd hr - \$2.50	Same as Launch	No Change	1 st hr - \$2.00 2 nd hr - \$2.50 3 rd hr - \$3.00	
	Time Limits	1 hr	3 hrs	Same as Launch	No Change	No Change	
	Parking Rates	\$1.50/hr	Premium - \$2.25/hr Value - \$1.00/hr	Premium - \$2.75/hr Value - \$1.50/hr	No Change	Premium - \$3.25/hr Value - \$2.00/hr	
	Time Limits	30 min - 2 hr	Premium - 2 hr Value - 8 hr	Same as Launch	No Change	No Change	
Southside	Parking Rates	\$1.50/hr	Premium - \$2.25/hr Value - \$1.25/hr	Premium - \$2.75/hr Value - \$1.50/hr	No Change	Premium - \$3.25/hr Value - \$1.50/hr	
	Time Limits	\$1.75/hr (Premium)	Premium - 2 hr Value - 4 hr	Premium - 2 hr Value - 8 hr	No Change	Premium - No Change Value - 4 hr	
Downtown	Parking Rates	\$1.50/hr	Premium - 2 hr Value - 4 hr	Same as Launch	Same as Launch	Same as Launch	
	Time Limits	30 min - 2 hr	3 hr	Same as Launch	Same as Launch	Same as Launch	
Off-Street Facilities	Parking Rates	\$1.50/hr	\$1.50/hr	Same as Launch	Same as Launch	\$2.00/hr	
	Time Limits	2 hr	3 hr	Same as Launch	Same as Launch	Same as Launch	
	Parking Rates (non-validated)	Hourly - \$3/hr 4+ hrs - \$18 Early Bird - \$8 Monthly - \$150	First hour free Hourly - \$1/hr 4+ hrs - \$15 Early Bird - \$9 Monthly - \$150	Same as Launch	First hour - Same Up to 2-4 hrs - \$2/hr 4+ hrs - \$16 Early Bird - Same Monthly - Same	No Change	No Change
	Parking Rates	Hourly - \$2.50/hr 4+ hrs - \$15 Early Bird - \$8 Monthly - \$150	Hourly - \$2.50/hr 4+ hrs - \$17 Early Bird - \$9 Monthly - \$170	Hourly - \$2/hr 4+ hrs - \$20 Early Bird - \$10 Monthly - \$190	Hourly - No Change 4+ hrs - No Change Early Bird - \$11 Monthly - No Change	Hourly - No Change 4+ hrs - No Change Early Bird - \$12 Monthly - No Change	
Oxford Garage (located in the Downtown area)	Parking Rates	Hourly - \$2.50/hr 4+ hrs - \$15 Monthly - \$150	Hourly - \$2/hr 4+ hrs - \$17 Monthly - \$170	Same as Launch	Same as Launch	Same as Launch	
Berkeley Way Lot (located in the Downtown area)	Parking Rates	First 2 hrs - \$1.50/hr Next 4 hrs - \$2.50/hr	No change	\$1.50/hr	Same	\$2.00/hr	
	Time Limits	6 hr	No change	8 hr	Same	4 hr	

Source: City of Berkeley

Governance and Management

The goBerkeley program is led by the City of Berkeley Department of Public Works (Transportation Division) in partnership with AC Transit, City CarShare, and TransForm (a local transportation advocacy group). In order to implement the program, an ordinance was passed revising Chapter 14.52 of the Berkeley Municipal Code to enable demand-responsive rate changes within the project area.

Program Evaluation

On December 16, 2014, the City of Berkeley released an initial draft evaluation of the results of the pilot program. (The final results of the program are pending.) The report states that in its first phase, the goBerkeley TDM Program resulted in an overall reduction in automobile use, while drivers found that their parking experience in the City had improved:

- Drivers can now find a parking space more easily
- On-street parking availability in the most congested areas has improved
- More drivers are using the Telegraph Channing Garage, a previously underutilized facility
- Increases to parking time limits and improved parking signage significantly improved customer experience
- Changes to parking rates and time limits succeeded in changing driver behavior and have shifted parking demand in neighborhoods to metered parking spaces
- A majority of parkers continue to rank "Proximity to Location" as the most important factor in seeking a parking space

Key Lessons

When interviewed in 2015, City of Berkeley staff stressed that a successful variable-priced parking program should be about meeting parking performance goals, not increasing revenue. In addition to pricing, time limits are a core aspect of parking management that should be considered in the implementation of such a program. City staff noted that extending inappropriate time limits and relying more on pricing to ensure availability has been the "biggest win available," since the short time limits previously in effect did not match many people's needs and activities. The Berkeley program splits curb parking into two general categories: "Value" and "Premium". City staff report that this division ensures high-value on-street spaces remain available, while still providing longer-term park-once opportunities along the periphery and off-street.

Other advice provided by goBerkeley project staff for cities considering similar initiatives includes the following:

- Outreach, marketing, and simplicity are core elements to changing behavior and delivering a program that achieves results
- Transparency and reporting of results is key in gaining public trust and support
- Starting with a small project area allows for the program to be implemented effectively and for errors to be ironed out
- Solve the problem with the data, then keep things as simple as possible

San Luis Obispo, California

Located on the Central Coast midway between Los Angeles and San Francisco, the City of San Luis Obispo, population 45,900, is a center of education, retail, and county government. Downtown San Luis Obispo is situated about a mile south of the California Polytechnic State University (Cal Poly) campus, and is a lively and popular destination for students as well as full-time residents.

Access & Parking Management Plan

Parking meters have long been part of the City's approach to managing parking demand, and were first introduced in downtown San Luis Obispo in 1947. The City has adopted several plans since then to manage its parking supply. San Luis Obispo's approach to parking management is now guided by the *Access & Parking Management Plan* the City adopted in 2001, which has since been updated and amended incrementally. The plan's principles have served as the basis for parking management downtown. It includes goals, policies, and actions for the management of general use parking, employee parking, downtown residents parking, juror parking, and for the expansion of parking.

The plan's policies emphasize maximizing the use of all parking structures and lots, encouraging the use of curb spaces for shorter-term parking, and encouraging future off-street parking to meet the City's aesthetic goals. The plan also suggests installing parking meters or posting time limits on blocks with 75% of commercial frontage. In the commercial core where shorter-term parking is needed, the plan recommends placing 30-minute spaces at the end of each block, as well as other parts of the block where appropriate.

The strategies for achieving these goals include publicizing the availability of spaces in underutilized off-street facilities to increase their use; offering permits for 10-hour metered parking spaces on lower-demand blocks; and periodically evaluating the number of spaces dedicated to commercial loading.

The City's tiered pricing and time limit structure encourages long-term parkers to find spaces in lower-demand areas. Downtown employees are also encouraged to use travel modes other than driving alone to commute to downtown. In order to reduce the amount of parking needed for new residences downtown, residents are allowed to park overnight in designated lower-demand areas that do not significantly interfere with customer and employee parking.

Price Changes

Many of the recommendations in the City's parking management plan were adopted 5-10 years ago, including building additional structures and revising the downtown rate structure. Several major changes have occurred recently, however, including increasing the rate at spaces in the City's "super core" to \$1.50 per hour and transitioning to smart meters that accept credit cards at those spaces.

In June 2012, meter enforcement was extended to include Sundays, from 1-6 p.m. Meters are now enforced every day of the year, including holidays. City staff reports that the business community recognized the need to manage demand on Sundays, and was supportive of this change, particularly with the addition of meters that accept credit cards. According to parking manager Robert Horch, "Downtown employees report there's more turnover now, and shoppers can find spaces closer to their destination."

Current Parking Program

The majority of visitor and employee parking in Downtown San Luis Obispo is provided on street and in public garages. The City has approximately 1,150 metered parking spaces in its downtown, and operates three off-street structures and numerous metered lots. Meters operate Monday through Saturday, 9 a.m.-6 p.m., and Sunday, 1 p.m. to 6 p.m. Meters are enforced year round, including holidays.

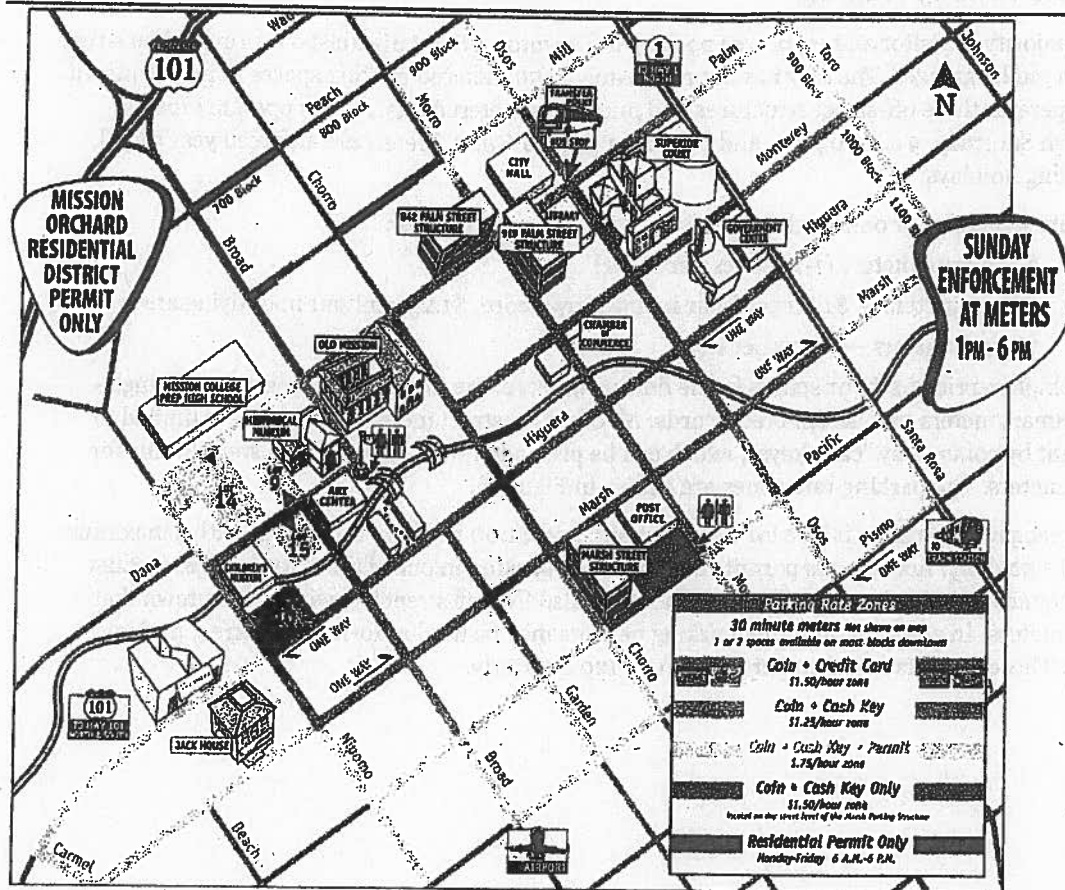
The rate structure for on-street meters is split into three categories:

- 30-minute meters (1-2 spaces per block)
- 2-hour meters — \$1.50 per hour in downtown core; \$1.25 per hour in outlying areas
- 10-hour meters — \$0.75 per hour

At the higher-priced 2-hour spaces in the downtown core, the City recently upgraded to single-space smart meters that accept credit cards. All other on-street meters in the city are limited to payment by coins or by "cash keys", which can be preloaded with up to \$100 in stored value for use at meters. The parking rate zones are shown in Figure 6.

Off-street garage parking is free for the first hour, and \$1.00 per hour thereafter, with a maximum fee of \$7.50 daily. Access pass permits for unlimited parking in one of the three garages is \$225 (billed quarterly). As shown in Figure 6, there are also five off-street lots within downtown that utilize meters. In addition, monthly parking permits may be used at 10-hour on-street parking spaces. These permits cost \$40 per month or \$120 quarterly.

Figure 6 Downtown San Luis Obispo Parking Map



Source: City of San Luis Obispo

Outreach

San Luis Obispo parking management staff members meet monthly with business representatives of the Downtown Association's Parking and Access Committee to discuss transportation and parking issues in the downtown. This ongoing dialogue reduces conflict over policy changes and has ensured business buy-in for major initiatives such as parking meter enforcement on Sundays. The committee is focused on all modes of access to downtown, including transit, biking, walking, and driving. City parking managers facilitate access and view themselves as partners to downtown businesses.

Technology

Although the City is interested in upgrading all paid spaces to smart meters, the capital expense of doing so has prevented this from occurring until the economy improves. According to staff, the City prefers single-space smart meters as opposed to multi-space meters due to the added complexity of enforcing multi-space meters. The City has yet to determine the revenue impacts of upgrading to smart meters because the meters that were upgraded also had a rate adjustment at the same time. Citations have decreased with the adoption of the new meters, which reduces one source of revenue, but may encourage people to visit downtown more often.

The City is also evaluating the use of pay-by-phone technology at meters, but is concerned that people may see meters that appear expired and believe that the driver has not paid. Looking further into the future, staff anticipates that all payment may eventually shift to smart phones or other devices, eventually obviating the need for meters entirely.

Key Lessons

San Luis Obispo provides an example of a small town that has proactively and successfully managed its parking supply with strong support from the business community. Many of its practices are on the vanguard of parking management for a city of any size, including charging for parking on Sundays and all holidays. In other respects, however, the City has been cautious about installing pay-by-phone technology and citywide smart meters until it can do so without imperiling its finances or risking public backlash. There are several major lessons to be learned from San Luis Obispo:

Develop a plan and stick with its goals and policies. San Luis Obispo has not adopted a new parking management plan in over a decade, instead carrying out the recommendations of its 2003 plan while amending it as necessary to accommodate changing conditions. The 2003 plan provided flexibility, strong guidance, and goals that were broadly accepted by the community. By continuing to refer to these goals and policies, the City has ensured buy-in from people who have embraced the underlying purpose of the plan.

Maintain a close relationship with downtown stakeholders. The City of San Luis Obispo's parking management staff view themselves as partners with downtown businesses, ensuring that visitors can access Downtown and shop without hassle. By meeting every month with a business advisory group and involving them in the decision-making process, the City has been able to implement parking management policies that encourage availability without incurring major backlash.

Distribute demand through pricing/time limits and facility locations. An important aspect of the 2003 parking management plan that the City has consistently followed is the prioritization of parking spaces in the downtown core for short-term "convenience" trips, while encouraging longer-term parkers to use spaces on the periphery of downtown. The City's policies have encouraged this through price structures, time limits, and by primarily building garages on the periphery of downtown, to intercept longer-term parkers before they reach the more congested core.

Use TDM measures to help reduce demand from employees. The City of San Luis Obispo treats its parking program as a component of an overall access plan. By encouraging employer transportation demand management measures and operating a transit system that helps to reduce demand for parking downtown, the City is able to maximize the number visitors to downtown without expanding its parking supply as quickly (and without raising parking rates as high as they otherwise would need to be to manage increased demand).

San Mateo, California

The City of San Mateo, a community of 101,000 residents, is located on the San Francisco Peninsula, 19 miles south of San Francisco. Downtown San Mateo is a bustling center of retail, office, and residential buildings, encompassing roughly 70 blocks between El Camino Real and

US-101. Major attractions in the downtown include the Caltrain commuter rail station, a downtown cinema, and active retail corridors, as well as the 16.3-acre Central Park.

Downtown Parking Management Plan

Approved in 2014, the Downtown San Mateo Parking Management Plan addresses an increase in parking demand and changes in parking technology since the previous plan from 2003. The Plan also builds on recommendations from the City's 2009 Downtown Area Plan, including identifying potential funding for a new parking garage. A key overall purpose of the plan is to help businesses achieve the goal of providing parking for customers. In the long term, the City may need to build more parking, but data from the Plan suggests that there is currently underutilized parking in downtown. The Plan also focuses on opportunities to better manage and utilize existing spaces through updates to pricing structures, enforcement hours, and better marketing and signage to help direct visitors find available spaces.

Price Changes

Updating the pricing structure forms the thrust of the parking management approach. After surveying a range of potential rates, the City settled on updating the rate policy and pricing to allow for rate ranges for on- and off-street spaces from \$0.25 to \$2.00 per hour. Within this range, staff are allowed to make rate changes of \$0.25, where warranted by demand every 1-2 years. Parking permits are also set at a range of prices, from \$35 to \$100 per month. Prices are set based on a desired occupancy standard of 85%. Additional changes implemented to support the progressive pricing program include shortening on-street time limits from four hours to three and eliminating time limits in garages and lots, to encourage long-term parkers to use off-street spaces and keep on-street spaces available for shorter-term parking, and extending on-street parking enforcement from 6:00 p.m. to 8:00 p.m. (Monday through Saturday).

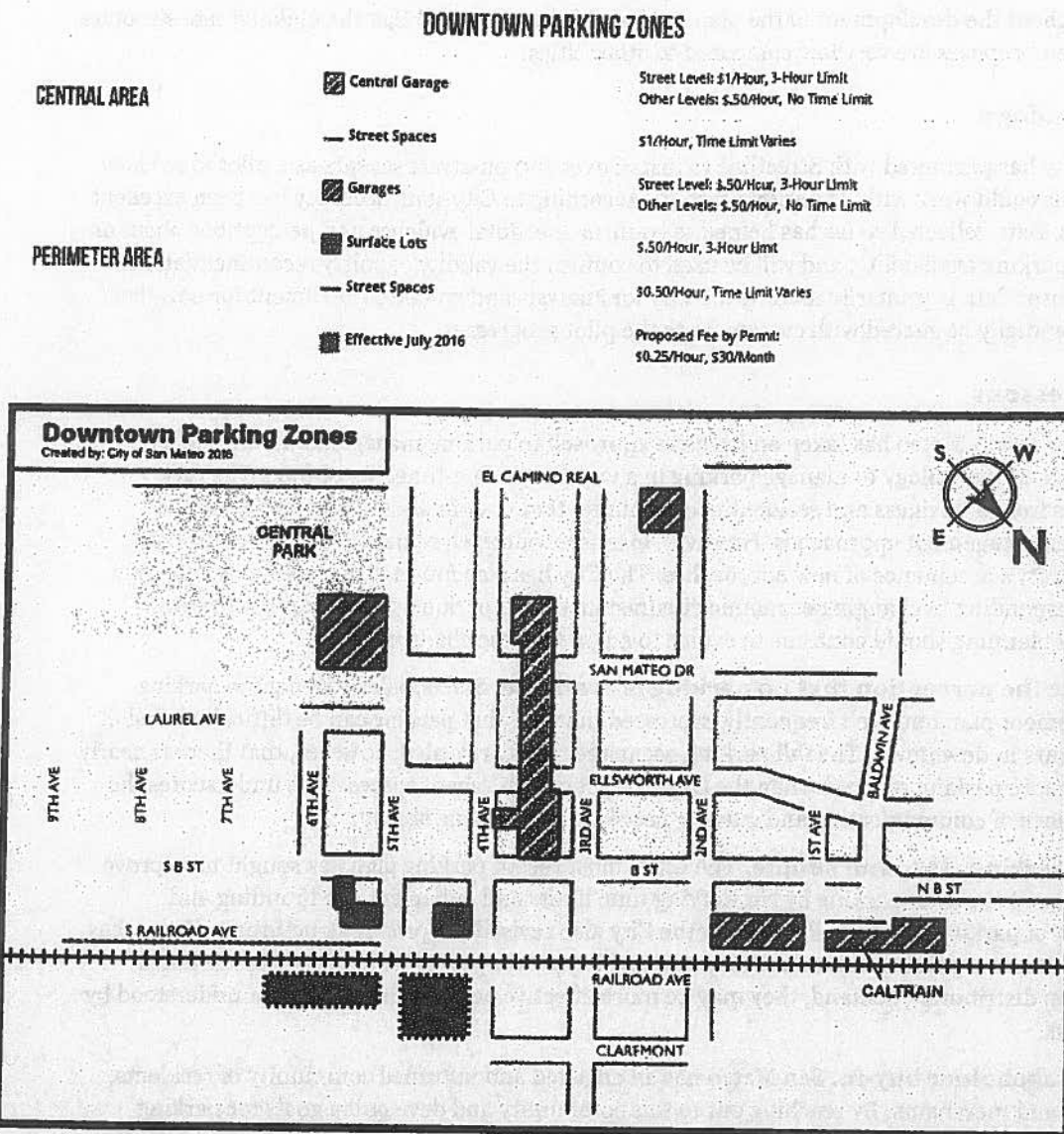
Current Parking Program

The City of San Mateo has approximately 2,900 parking spaces downtown, including about 1,200 on-street spaces and 1,700 off-street spaces in five garages and four lots. Parking meter revenues are stored in a special revenue fund that supports parking operations, enforcement, and facility maintenance, as well as landscaping and security downtown. The Downtown Parking Zone is broken up into two categories:

- **Orange** – Intended for errands needing less time. The higher price encourages turnover, making it easier for customers to find a spot and businesses to thrive.
- **Green** – Intended for downtown employees and those needed more time. A few steps from the core, these spaces cost less and provide options for all-day parking.

The differentiated parking pricing and regulations for the Downtown, which went into effect in July 2015, are shown in Figure 7.

Figure 7 Downtown San Mateo Parking Map



Source: City of San Mateo

Outreach

The City of San Mateo worked with downtown stakeholder groups to ensure broad community support for the plan's overall approach and specific recommendations. According to City staff, the downtown business community supports the plan because they benefit from efficiently using the current inventory of spaces to free up parking in locations where people most want to park.

Stakeholder meetings were held with San Mateo United Homeowners Association (SMUHA), the Downtown San Mateo Association, and the San Mateo Area Chamber of Commerce. The City worked separately with each of these groups, and conducted forums and online outreach throughout the development of the plan. Stakeholders recognized that the updated rate structure the plan proposes are very low compared to other cities.

Technology

The City has partnered with Streetline to install over 100 on-street sensors as a pilot to see how well this could work with its parking system. According to City staff, accuracy has been excellent to date. Data collected so far has helped to confirm anecdotal evidence and perceptions about on-street parking availability, and will be used to confirm the validity of policy recommendations. The sensor data is primarily used by the City for analysis and guided enforcement for now, but will eventually be shared with customers as the pilot progresses.

Key Lessons

The City of San Mateo has taken an iterative approach to parking management, refining its policies and technology to manage parking in a way that is fine-tuned yet simple. The City benefits from a business and residential community that understands and values a range of parking management approaches. However, extensive outreach remains a critical part of the community's acceptance of new approaches. The City has also found that projections vary over time, responding to changing economic circumstances and parking management strategies. Parking planning should continue to evolve to adapt to these changes.

Change the perception that no parking is available. Stakeholders during the parking management plan outreach frequently expressed the view that parking can be difficult to find at peak hours in downtown. The full parking occupancy study revealed, however, that there is nearly always more parking available than the City's target of 15% vacant spaces. This underscores the importance of communicating and guiding people to the existing supply.

Make parking clear and simple. The City's most recent parking plan has sought to improve the ease and clarity of parking by simplifying time limits and enhancing the branding and visibility of parking facilities. Previously, the City also revised the pricing structures in its garages to make it less confusing and more consistent. Although simpler pricing structures are not as precise in distributing demand, they may be more effective because they are better understood by motorists.

Earn stakeholder buy-in. San Mateo has an engaged and informed community of residents, visitors, and merchants. By reaching out to this community and developing goals for parking planning prior to developing specific recommendations, the City has ensured the support of community members as solutions are adopted that further these goals. It is unlikely that the City would have been able to reach a strong consensus around issues such as changing parking rates and extending meter hours to 8 p.m. without conducting extensive and highly interactive outreach.

Adopt policies and technology gradually. San Mateo has charged for parking on its streets for almost 70 years. As a result, most residents and visitors are accustomed to paying to park. Further changes, such as setting different rates in different areas or extending meter hours, may be more readily accepted by the community because they are relatively minor changes from the existing system. Likewise, technology upgrades have been made incrementally in San Mateo. The

City has staggered the adoption of smart meters on-street and in garages, the installation of on-street sensors, and future technology identified in the plan. Attempting to adopt all of these improvements at once would have been a much greater logistical challenge, with more opportunities for glitches to overwhelm City staff's capacity to correct them.

Seattle, Washington (SeaPark)

Since 2010, the City of Seattle (under the program brand SeaPark) has annually adjusted on-street parking rates, time limits, and paid hours of operation with the goal of maintaining one to two parking spaces available on each blockface throughout the day. SDOT (Seattle Department of Transportation) has converted this policy goal to a target occupancy range of 70-85%. Seattle's program is special in that it applies to all metered curb parking spaces in the city (approximately 12,000 spaces across 32 different rate areas).

Program Goals

The goals of the program are as follows:

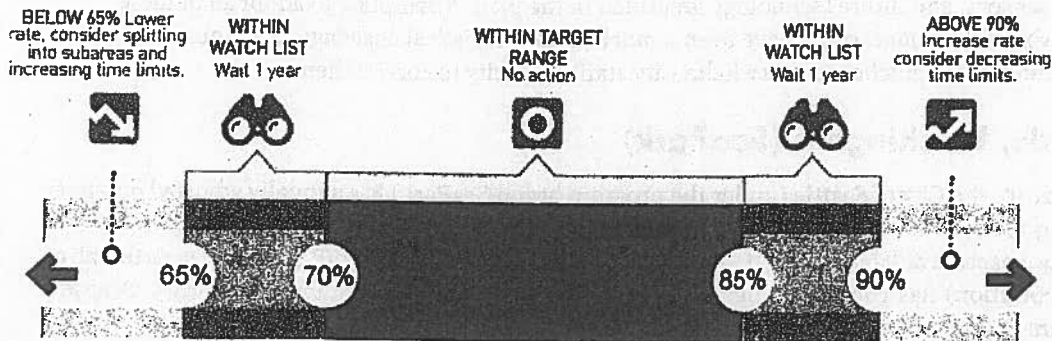
- Help customers reliably find parking within easy walking distance of their destinations, while ensuring spaces are well used
- Conserve fuel, reduce emissions, and lessen traffic congestion from drivers circling in search of parking
- Increase access to businesses by ensuring turnover of parked cars

Price Changes

SDOT conducts hourly manual data collections each spring, which are used to create an Annual Paid Parking study. Subsequently, each fall, findings of the study are then used to adjust rates, time limits, and paid parking hours. Transaction data from meters is used only to estimate curb parking occupancy for specific situations, such as seasonal rates around tourist areas or changes based on time of day. Figure 8 represents the protocols that SDOT utilizes to adjust rates on the basis of the annual report. All-day occupancy rates are calculated based on the three hours with the highest occupancy from either 8:00 a.m. to 5:00 p.m. (if paid parking ends at 6:00 p.m.) or 8:00 a.m. to 7:00 p.m. (if paid parking ends at 8:00 p.m.). Occupancy for the three highest hours is not averaged, nor needs to be consecutive, but is calculated as the total vehicles divided by the total supply in those hours.

Areas with occupancies that fall within five percent of the 70-85% target range (65-69% and 86-90%) are placed on a "watch list" for a year. Watch list areas that fall outside of the target range in the following year will have their price rates either decreased or increased. Any areas with occupancies that fall outside of either the target or watch list range (below 65% or above 90%) will have their price rates decreased or increased, respectively in the same year. Since 2010 the SeaPark program has resulted over 70 rate changes. All annual rate changes are made in \$0.50 increments.

Figure 8 SDOT Price Change Protocols

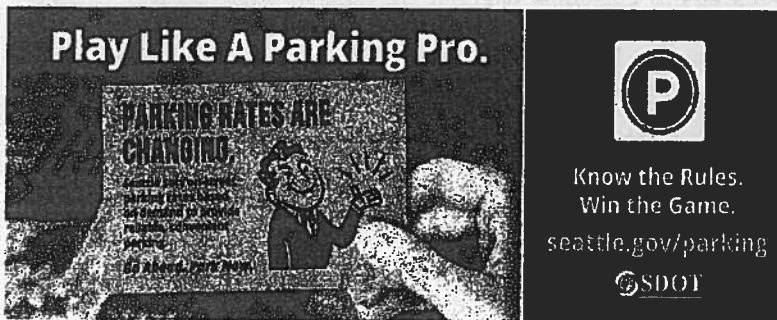


Source: Seattle Department of Transportation

Outreach

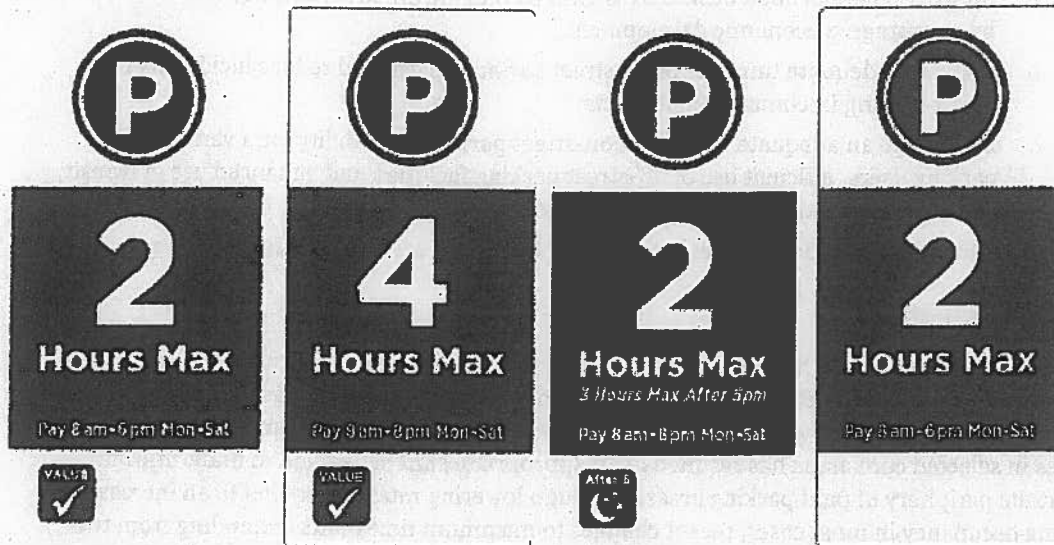
Public outreach and marketing has been a core element of the SeaPark program since its inception. An advisory committee comprised of local businesses owners and the chamber of commerce meets quarterly with the Department of Transportation to address issues. According to City staff public participation in meetings and general concern has dwindled as users have become more used to the program and because any changes that are made are based upon data. In addition to public meetings, rate changes are explained to users through the “Play Like A Parking Pro” media campaign (see Figure 9), which features humorous educational videos and graphics to inform users of new parking policies. The marketing strength of the program is also shown in the signage utilized to inform and educate users about parking options. The use of large green “Best Value” signs on blockfaces with less expensive parking, and/or longer time limits, encourages parkers to shift from high-demand streets to underutilized blockfaces at the periphery of paid parking areas (see Figure 10).

Figure 9 SeaPark Marketing Materials



Source: Seattle Department of Transportation

Figure 10 SeaPark Zone Signage



Source: Seattle Department of Transportation

Technology

The City of Seattle is currently in the process of switching out pay-and-display pay stations with IPS pay-by-plate multi-space pay stations that allow for time of day pricing and for rates to be set remotely. Seattle is unusual in that all paid parking is governed by multi-space units versus single-head meters.

Governance and Management

In late 2010 the City adopted Municipal Code 11.16.121 which gives the Department of Transportation the authority to adjust parking rates under the following terms:⁵

1. Parking rates to be charged at parking payment devices, including parking meters, for parking in city rights-of-way and other city-controlled parking areas under the jurisdiction of Seattle Department of Transportation shall be within rate limits established by this section. Rates may vary according to location, time of day, maximum parking time allowed, the capabilities of available parking payment devices, and any other factors the Director determines are pertinent. In setting rates, the Director is not subject to Chapter 3.02 of the Seattle Municipal Code.
2. The Director of Transportation is authorized to set parking rates up to \$4.00 per hour ("Maximum Hourly Rate"). When parking rates are in effect, parking rates shall be set no lower than \$0.75 per hour ("Minimum Hourly Rate").
3. The Director shall establish on-street parking rates and shall adjust parking rates higher (up to the Maximum Hourly Rate) or lower (as low as the Minimum Hourly Rate) in

⁵ City of Seattle Municipal Code 11.16.121

neighborhood parking areas based on measured occupancy so that approximately one or two open spaces are available on each blockface throughout the day in order to:

- a. Support neighborhood business districts by making on-street parking available and by encouraging economic development;
- b. Maintain adequate turnover of on-street parking spaces and reduce incidents of meter feeding in commercial districts;
- c. Encourage an adequate amount of on-street parking availability for a variety of parking users, efficient use of off-street parking facilities, and enhanced use of transit and other transportation alternatives; and,
- d. Reduce congestion in travel lanes caused by drivers seeking on-street parking.

Program Evaluation

SDOT's Annual Paid Parking Survey confirms that previous changes to rates and time limits have had the intended effect of shifting demand from the most heavily used subareas to peripheral areas and times of day when/where parking is more widely available. This means that price increases in selected core areas has resulted in an appropriate shift of demand to underutilized blocks at the periphery of paid parking areas. Although lowering rates has not led to an increase in parking occupancy in most cases, recent changes to maximum time limits (extending from two to four or ten hours, with no change in rate) have increased utilization in some areas. From the 2014 Annual Survey to the 2015 Annual Survey, after 2014 changes were made, approximately a third of rate changes resulted in the intended areas achieving the target range, while another third moved closer to the target range.

Key Lessons

When interviewed in 2015 and in 2016 as a follow up for this report, SDOT staff reiterated the importance of simplicity and effective messaging in order to encourage behavioral changes that result in shifts of parking utilization. A key aspect of this is to have clear indication of where variable pricing applies in order to limit confusion for users; this is a particular strength of SeaPark as it is applied citywide. In addition to compelling communications, SDOT staff advised that a city keep targets and metrics simple and not out of reach in order to make the program sustainable year over year.⁶

NEIGHBORHOOD PARKING PLAN

A neighborhood parking plan is a neighborhood-specific framework for coordinating parking related issues. In many cases, a city-wide approach cannot effectively manage parking for cities with diverse neighborhoods and locations. Neighborhood parking plans tailor parking tools, policies, and processes to the unique land use mix, transportation access, and economic goals of particular neighborhoods. As a result, this allows for a holistic stakeholder outreach and decision-making process in which all parking tools and programs can be discussed, coordinated, and implemented simultaneously. Components of neighborhood parking plans include a review of neighborhood parking supply, regulations, and occupancy and an analysis of neighborhood

⁶ Snyder, Mary Catherine. Interview with SDOT, February 17, 2015 and August 3, 2016.

parking challenges (difficulty of finding a space, double parking, turnover, oversized vehicles, etc.). Neighborhood parking plans can also better achieve neighborhood goals such as:

- Making it easier to find parking
- Reducing double parking, circling, and congestion
- Reducing long-term on-street vehicle storage
- Encouraging use of transit, walking, and biking

Cities which have implemented parking plans to better coordinate and manage parking in specific neighborhoods include Houston (TX), Portland (OR), and San Francisco (CA). The objectives and recommendations made in these neighborhood parking plans are described below.

Houston, Texas (Rice Village)

The Rice Village area in Houston is a popular commercial and residential district with approximately 400 businesses. A parking report for the neighborhood cited parking, management, and infrastructure as three major interconnected issues facing Rice Village. Access to parking is a persistent problem, with a high demand for parking throughout the day and visitors consistently cite parking availability as an issue. A parking inventory of the area identified more than 1,000 unused parking spaces in Rice Village at all times revealing that the supply for the area is much higher than the demand. Unfortunately, many of these under-utilized spaces are private and unavailable to the public.

The parking plan recommended the following strategies to address these issues by unlocking the existing parking stock and reducing the number of circling vehicles in the main commercial areas of Rice Village.

- Create a managing special district to facilitate conversations between the City of Houston and private stakeholders to address parking and other issues
- Permit the City's Parking Management Division to oversee all public and private parking and price parking according to demand
- Create a parking benefit district to fund pressing infrastructural improvements
- Improve signage and wayfinding to direct visitors to nearby off street parking
- Implement bicycle, pedestrian, and public space improvements to promote walking and biking in the area

Portland, Oregon (Northwest District)

Portland's Northwest District currently generates the highest on-street parking demand in the city. Several corridors of concentrated commercial and institutional use, surrounded by residential areas attract a large volume of traffic from outside the area as well as traffic from residents and employees of the neighborhood. Occupancy in the District is high throughout the day in both residential and commercial areas with up to an 85% occupancy during peak hours. The Northwest District Parking Management Plan sought to achieve continued residential livability and business vitality in the area by ensuring that access and parking keep pace with expanding needs.

The City of Portland is currently in the process of implementing the following management strategies as recommended in the parking management plan, to reduce parking issues such as illegal parking and competition among users.

- Expansion of an existing restricted parking zone permit area to be inclusive of majority of the Northwest neighborhood
- Integration of time limited, metered, and permit parking in the neighborhood.
- Elimination of unregulated parking spaces
- City Council recently voted on an amendment to change the City Code to allow accessory parking facilities to operate commercially as shared parking facilities

San Francisco, CA (Mission Bay)

The San Francisco Mission Bay neighborhood is a rapidly-growing, high-density, mixed-use neighborhood. Over the past decade, several plans have been developed to manage on-street parking in the area and encourage transit, walking, and biking. In 2002, during the development of Mission Bay, the city established the neighborhood as a metering district; and in 2008, Mission Bay was included as part of the SFpark pilot project. The parking management strategy was designed to improve the parking imbalance created from the combination of unregulated and time limited spaces and the large parking demand generated by events at or near AT&T Park.

Elements of the meter district include the following:

- Installation of credit card parking meters at every parking space
- Demand-responsive rates
- Special event pricing
- Extended metering hours for evening events

AMBASSADOR PARKING ENFORCEMENT

Parking enforcement is frequently a sore spot for constituent relations. Many cities, including Santa Rosa, are working to improve the customer service aspects of parking enforcement. Based upon the community policing model, parking ambassador programs provide staff or volunteers to patrol downtown parking areas and serve as a liaison between businesses owners and city governments. Parking ambassadors are typically dressed in bright or branded apparel that makes them easy to identify and approachable. In addition to electronic citation issuance devices, parking ambassadors should come equipped with maps and informational resources. The objective of parking ambassadors is to promote and enforce the parking policies of a downtown area, while providing information and guidance to downtown patrons in a friendly manner.

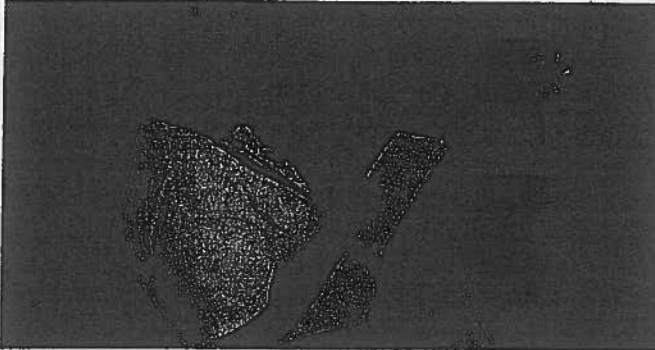
In Santa Rosa, the majority of enforcement and operations staff have completed the Certified Tourism Ambassador program offered by Sonoma County Tourism. The program's goal is to improve the visitor experience, thereby increasing visitor spending. Examples of other existing parking ambassador programs throughout the United States are provided below:

Hartford, Connecticut – Hartford's Parking Ambassadors are visible throughout Downtown in bright red jackets, providing directions, answering questions about regulations, and able to make change for Pay-and-Display stations. In addition to introducing the ambassador program geared towards improved enforcement to encourage turnover for businesses, Hartford has made efforts to make citation payments and appeals easier to resolve through online and telephone options.

Hendersonville, North Carolina – Two part-time Parking Ambassadors patrol the downtown zone and serve as liaison to the business owners and the City while also writing warnings and citations. The City introduced the program in order to combat inconsistent enforcement due to a lack of full-time officers and to cope with an increase in tourists.

Houston, Texas – As part of the City's Volunteer Initiatives Program (VIP), the Parking Management Office holds volunteer trainings for citizens interested in fighting disabled parking abuse in their communities. The program is intended to ensure the availability of accessible parking spaces for those who need it most. Volunteers are required to attend a four-hour training session and pass a background check. Once complete, volunteers are permitted to issue citations to parkers observed illegally utilizing disabled parking spaces, as shown Figure 11.

Figure 11 Houston Parking Enforcement Volunteer on Patrol



Omaha, Nebraska – Omaha's Parking Ambassadors, identifiable by Park Omaha branded apparel, provide assistance with parking guidelines, safety tips, and directions to popular venues throughout Downtown, in addition to writing citations for metered locations.

STATION AREA PARKING

Parking is widely recognized as an important factor influencing transit access and ridership. As transit agencies work to attract customers, parking policies—in particular parking pricing—can play a critical role in transit agency decision making. An increasing number of transit agencies have begun to think carefully about how their parking policies encourage or discourage transit usage and how to efficiently use resources consumed for parking.

Parking at transit stations is not always a priority for transit agencies. Many transit stations are located in areas where priorities for sufficient parking are mixed with other priorities such as economic vitality or resident parking convenience. In order to address these context specific priorities, transit agencies have implemented a variety of transit supportive strategies beyond the expansion of parking. These strategies include bicycle parking and other alternative parking options, parking pricing based on demand or tiered rate structures, and parking management partnerships between the agency and the public and private sectors.

Greater Chicago, Illinois (Metra)

The City of Berwyn and the Village of Hinsdale located in the Greater Chicago area have vibrant downtown districts located on the Metra rail line. Due to their proximity to a rail station and role as key destinations, the two areas have to fulfill the diverse parking needs of transit users, residents, visitors, and employees. As a result, the two municipalities implemented station-specific parking plans to identify current and future parking challenges, and to identify policy and enforcement strategies to address them. The recommended strategies of both plans focused on utilizing the existing parking stock of the area through the use of a demand-based parking

program, including permit and metered spaces for Metra rail riders. The objective is to improve current parking conditions and plan for future parking demands in the area. Beyond parking pricing, both communities identified additional improvement strategies to support the transit area:

- Improved parking information and wayfinding.
- Improved parking technology
- Increased parking enforcement
- Improvements and expansion of bicycle facilities at Metra stations and to the local bicycle network
- Improvements to the pedestrian network and experience to increase safety

San Francisco, CA (SFMTA)

The 2008 Balboa Park Station Area Plan provides extensive parking management recommendations for the area surrounding south central San Francisco's Balboa Park Station, which is served by BART and Muni Metro rail service and Muni bus lines. Parking management strategies included in the plan were crafted with the objective of not only supporting the needs of the transit station, but revitalizing the neighborhood as a commercial district and ensuring standards that promote transit-oriented development. Recommended policies for station area parking include:

- Eliminating minimum off-street parking requirements and establishing parking caps
- Prioritizing spaces for residents, shoppers, and non-commute transit trips
- Promoting car-share programs to reduce parking needs
- Improving metered parking
- Adding public off-street parking only after all existing and on-street parking opportunities have been exhausted

Seattle, Washington (SDOT)

In efforts to discourage Sound Transit users from "hide and ride" parking – when transit users park in neighborhoods surrounding transit stations – the City of Seattle committed to mitigation measures to prevent transit riders from parking in neighborhoods within a quarter mile of transit stations. To respond to unique community needs of each area, the City works with each individual neighborhood and determine the appropriate parking controls to discourage commuter parking.

Mitigation measures can include the following.

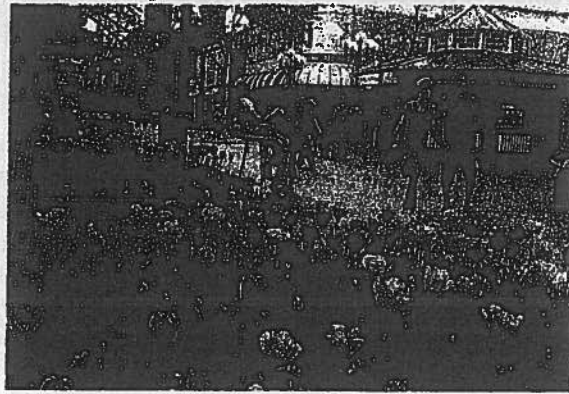
- 1 or 2-hour time limit signs
- Passenger, truck and load/unload zones
- Residential parking zone signage
- Paid parking technology

Additionally, restricted parking zones (RPZs) in Seattle help maintain available parking in areas for local residents, customers, and service providers through the use of time limits for non-permitted vehicles and unlimited parking for permitted, local vehicles. In 2009, the city expanded the program to enable local business employees to apply for permits.

PARKING BENEFIT DISTRICT

Boulder, Colorado

Having recovered from near death in the 1970s, Boulder's downtown business district now comprises over 1,200 businesses and roughly 10,000 employees. Faced with both a shortage of parking for customers and citizens' aversion to additional traffic, the City developed a program that combines reduced subsidies for downtown parking with aggressive transportation demand management. These initiatives were introduced through the Central Area General Improvement District (CAGID), which was established in the 1970s. The program was set up by the City Council and Downtown Management Commission, which is made up of local businesses and property owners, in conjunction with the creation of the Pearl Street pedestrian mall. The intention was to provide parking on a district-wide basis on the periphery of the mall, avoiding the need to provide on-site parking for each business. It was seen as a tool for economic revitalization and promoting a good pedestrian environment, with the two going hand in hand. Initially, developers and property owners were skeptical of the proposals to create CAGID, but according to local planners and developers, they have been convinced by its success in catalyzing economic development.



Program

There are two ultimate goals for parking in the CAGID: to maximize use of existing supply, not revenue, and to fund improvements within the district through meter revenue. The existing program incorporates more than 800 on-street metered spaces and nine off-street facilities throughout a 30-block district of Downtown Denver.

Benefits to the District funded through parking meter revenue include:

- Historic preservation
- Streetscape improvements
- Bicycle parking
- Bikeshare
- Public Wi-Fi
- Free universal transit passes for Downtown employees (RTD Eco Pass)

In addition to the above, CAGID also funds the operation of a "Transportation Resource Center" in a downtown storefront. The responsibilities of the resource center include the following:

- Provide personalized advice and information about transit, bike, and pedestrian travel in Downtown
- Provide personalized ride-matching services for Downtown employees
- Marketing of transportation programs and incentives
- Coordination of transportation events like Bike-to-Work Day

- **Management of Downtown bike lockers**

All of these programs are funded by a \$325,000/year budget, funded by \$1 million in meter revenue transferred to CAGID via a Parking Benefit District mechanism. There are no parking requirements for any non-residential development in the District. New public parking garages are developed as needed and funded by parking fees (84%) and general fund taxes (16%).

In order to ensure the efficacy of the district's paid parking, CAGID uses sophisticated enforcement strategies such as license plate recognition. Neighborhood permit parking initiatives have been introduced to prevent overspill parking from commuters trying to avoid parking restrictions and charges downtown. Commuters are eligible, however, to buy on-street parking permits for \$90 per quarter. On blocks where average occupancy is lower than 75%, commuter permits are limited to four per blockface. This program is designed to be revenue neutral, so commuter fees cross-subsidize low annual resident fees of \$17 per year. In addition, businesses located within the district are eligible for free employee transit passes, called EcoPasses.

Key Lessons

Integrate parking policies with TDM measures. A core component of the CAGID's success is its ability to fund universal transit passes for Downtown workers. Taking the form of a simple photo ID card with the regional transit logo, the Eco Pass provides free rides on all local and regional bus transit services, as well as light rail and express bus services in the Denver region. Supported by meter revenue, the program is utilized by 83% of the approximately 10,000 employees working in the downtown area. Recent surveys show that people with an Eco Pass are four to seven times more likely to ride transit than those without the pass. By 2005, ten years after CAGID began offering Eco Passes, drive alone rates dropped from 56% to 36%, while transit use increased from 15% to 34%.

Pasadena, California

Old Pasadena has gained a reputation for being a pedestrian-friendly, vibrant downtown that combines a mix of uses with easy access by the automobile. Much of the area's success can be attributed to its parking management policies that have spawned a wide variety of streetscape improvements and new opportunities for increased transit ridership and development. Old Pasadena, however, was not always so prosperous. By the 1970s, much of Pasadena's downtown had become the city's "Skid Row" and was slated for redevelopment. Today, it has been revived due to extensive investments in the public realm funded by parking meter revenue, making it in turn the quintessential example of parking management and downtown revitalization.

Program

Until 1993, Old Pasadena had no parking meters. Local merchants opposed proposals install them were opposed by local merchants, fearing that paid parking would drive customers away. The compromise solution was to install the meters and charge a relatively high rate of \$1 per hour (including Sundays and evenings), but to spend all the revenue on public investments in the district. The City provided \$5 million in bond funding for street furniture, trees, tree grates and historic lighting fixtures, with the meter revenue stream used to repay the debt. In 2001, about one-third of meter revenue went to debt service, with the remainder used to fund new services

such as marketing, mounted police patrols, daily street sweeping and steam cleaning of sidewalks. Many of these services are provided through the Business Improvement District.

Despite fears from merchants, the Pasadena example shows that charging for parking can actually increase business for local retailers. A study in 2001 found that the average occupancy rate for curb parking was 83%, which represents around the optimum balance between revenue, efficiency, and availability. While pricing cannot create more spaces, it can make existing spaces more 'productive' by promoting turnover and making parking spaces more available. Metered spaces can be used by multiple customers who use the spot for 15 or 30 minutes. Meanwhile, drivers with a long appointment will park farther away for a lower rate because the short walk is less of an inconvenience.

Current Parking Program

Today Old Pasadena offers more than 7,500 spaces on street, within public and private garages, and in surface lots. On-street meters operate Sunday through Thursday from 11:00 a.m. to 8:00 p.m. and Friday through Saturday from 11:00 a.m. to Midnight. Meter rates are \$1.25 per hour in the core and \$0.75 on the periphery. As has been the case since the inception of the program more than two decades ago, meter revenues stay in Old Pasadena to fund streetscape and alleyway maintenance and improvement efforts. Public parking structure, stylized as "Park & Walk," within the area offer the first 90 minutes free, with each hour there after \$2.00, freeing up high value on-street spaces in front of businesses.

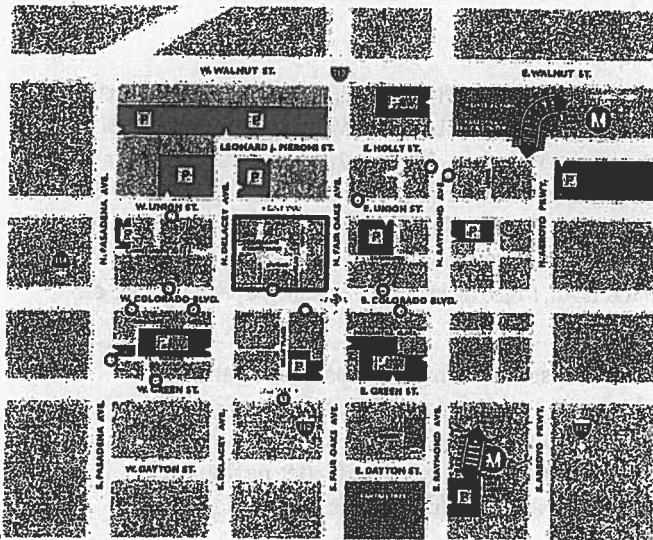
Within the Old Pasadena district, the City offers valet service. The universal valet parking program allows customers to drop off their vehicles at any of the 14 valet stations (Figure 12) within the district, and can arrange to have their vehicle waiting for them at any other valet stand. Various participating merchants allow validation that reduces the price of valet parking. The current cost is \$10 without validation, and the City does not regulate the price of valet parking.

Figure 12 Old Pasadena Parking Map



Old Pasadena Parking and Valet Map

- Park & Walk locations - 90 min. free
- Public Parking locations
- Valet Stand locations
- Metro Gold Line stations



Source: Old Pasadena Management District

Key Lessons

Facilitate adaptive reuse. The City's "Parking Credit Program" allows property owners in Old Pasadena to buy "zoning parking credits" instead of constructing additional parking spaces to satisfy minimum parking requirements. The program has been particularly important in allowing adaptive reuse of historic buildings that were built without parking, where minimum parking requirements would be triggered by a change in use. Since few of the buildings in this historic part of the city have off-street parking, this removed one of the major barriers to adaptive reuse.

The City issues 1.5 parking credits per space in the public garages, limiting the number of credits. Since the early 2000s, additional public parking spaces have been added to the general credit pool, and more may be added depending on demand. Though the fee was originally set at a very low rate (\$50 in 1987) to encourage business development, the rate has increased following yearly CPI adjustments; in 2004, the fee was set at \$127 per space per year. The fee is annual, rather than the lump sum common for similar fees in many other cities, allowing developers to avoid financing problems.

Ventura, California

In March 2007, the City Council of San Buenaventura (commonly known as Ventura) approved the Downtown Specific Plan, which included plans for a parking management program. The program set a goal of using parking pricing, rather than time limits, to achieve a curb parking utilization rate of approximately 85% on each block. In January 2009, the City Council adopted an ordinance to establish a Downtown Parking District (DPD), which also allows the City Transportation Manager to adjust parking rates based on occupancy in order to achieve the district's parking occupancy goals. In addition, the ordinance specifies that all revenues generated from the program are to be devoted to funding public facilities and services benefiting the district.

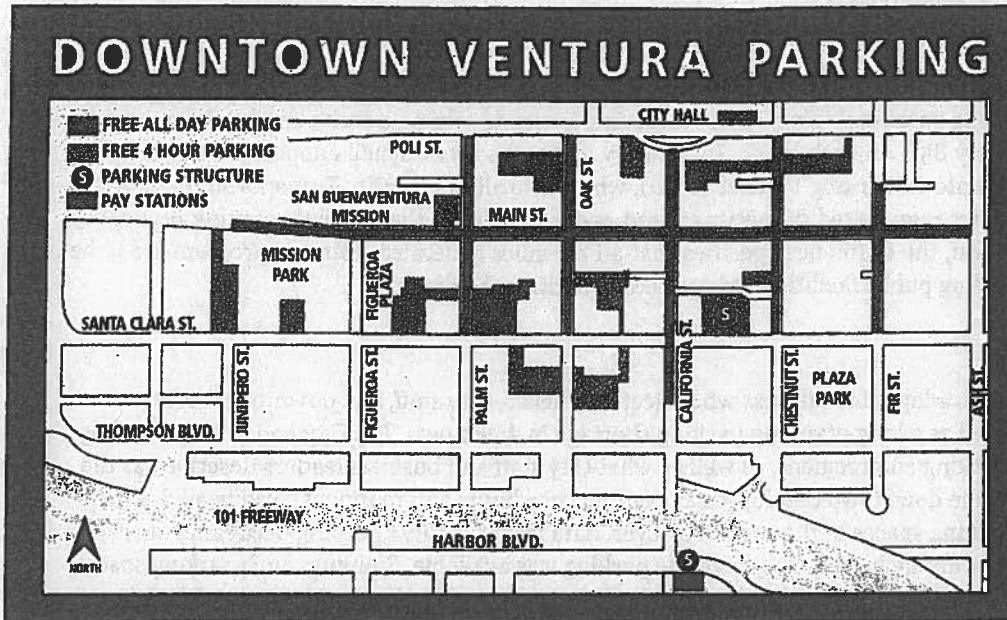
Program

The program was adopted to address what elected officials, City staff, and downtown business leaders described as a long-standing parking shortage in downtown. The City had limited funding available for parking enforcement, as well as what City staff and business leaders described as the adeptness of some downtown employees at evading time limits and routinely parking all day long in premium parking spaces at the curb. However, data from the City's parking occupancy surveys showed that at even the busiest hours, ample parking was available. Premium curb parking spaces were often fully occupied, while simultaneously, free public parking lots and garages a block or two away remained underused.

Previously, all curb parking and almost all off-street parking within the downtown was free, with time limits and parking citations for those who overstayed the limits used to regulate curb parking. In September 2010, the City installed new parking meters and began charging for parking on the downtown district's two main retail arteries, Main Street and California Street, as well as on the adjacent blocks of several side streets.⁷ 318 on-street meters were placed on "high-demand" blockfaces, or about 11% of downtown's parking supply, where turnover is key for downtown businesses. Time limits for the newly metered spaces were eliminated, with the City relying instead solely upon pricing to meet its parking availability goals for each block. Within the DPD, all off-street parking remains free.

⁷ "Parking | City of Ventura." <http://www.cityofventura.net/pw/transportation/parking>.

Figure 13 Ventura Downtown Parking District



Within the DPD, all on-site parking can be shared between land uses with different periods of peak parking demand, by ordinance. Shared parking is allowed to satisfy 100% of the minimum parking requirement for each land use, providing a degree of flexibility in code-mandated minimum parking requirements. In 2013, the first shared parking agreement was formalized with a new office building that leases 52 spaces in an existing off-street parking structure for \$71/month for parking between the hours of 8 a.m. and 5 p.m. For exclusive reserved spaces, the cost to lease parking is \$142/month. Revenues from this program help fund DPD expenditures.

In its first year of operation, the DPD generated \$530,000 from monthly structured parking permits and on-street metered spaces. Program revenue has been used to provide free outdoor wireless internet service within the Downtown Parking District. Visitors can access the wireless internet for a total of one hour at a time. Parking meter revenue has also been used to fund streetscape, landscaping, and lighting improvements in Downtown Ventura and a full-time police officer dedicated to Downtown.

Outreach and Facilitation

Implementation of Ventura's parking management program was contentious. Some residents complained that the pricing of parking was akin to a tax to fill budget gaps, while some store owners complained that it would hurt business.⁸ In 2011, a ballot initiative to remove meters was struck down in court.⁹ To counter these concerns, the City and downtown business leaders

⁸ "Ventura's Parking Meters a Success, or a Pain — Depends Who You Ask - Gallery."
<http://www.vcstar.com/news/venturas-parking-meters-success-or-pain-depends>.

⁹ "Judge Rejects Initiative to Banish Ventura Parking Meters | California Planning & Development Report."
<http://www.cp-dr.com/node/3014>.

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responded with a robust public outreach effort with the assistance of the Downtown Ventura Organization and Downtown Ventura Partners, two non-profit groups made up of downtown business and property owners. In the next City Council election, Council candidates supporting the meters won election or reelection by a substantial margin over a slate of anti-meter opponents, a development that appeared to end most debate over the program.

To implement parking pricing, Ventura installed wirelessly-networked multi-space meters (pay stations) manufactured by Digital Payment, which the City configured as pay-by-space machines. In addition to providing free public Wi-Fi throughout the downtown core, the pay stations are able to securely transmit parking meter transaction data to the City.

Key Lessons

Despite initial challenges from a number of vocal opponents, evaluations of the program since implementation suggest that variable parking pricing in conjunction with a parking benefit district in Ventura has been a success. In a survey conducted by the City in mid-2011, 83% of downtown merchants surveyed indicated that they support the new meters, with 13% neutral, and only 4% opposed.¹⁰

According to the City, in the first 12 months of the parking meters' operation the program collected \$542,000 in revenue from the 318 metered parking spaces. First-year startup expenses for the program (including both capital costs for the new parking meters, wireless network, signage and other components) came to \$1.17 million. Sixteen new business have opened in the downtown since the parking pay stations went into operation in 2010.

Return revenues to where they are generated. The revenue from the metered parking spaces funds what the City describes as "a cleaner, safer downtown for everyone". This includes funding a new dedicated police officer dedicated solely to patrolling downtown, as well as a team of nine police cadets dedicated to downtown security and parking enforcement. The meter revenues also are funding improved lighting and landscape improvements for downtown streets, parking lots and garages, to improve the perceived safety of downtown. The changes appear to be working to improve security in downtown Ventura. According to the City's police statistics, there was a 29% decrease in downtown crime in the first full year after the meters' installation.

¹⁰ "Downtown Merchants Support the Parking Meters!" <http://downtownventura.org/wp-content/uploads/Press-Release.pdf>.

