



University City District

The Case for Parklets: Measuring the Impact on Sidewalk Vitality and Neighborhood Businesses

OVERVIEW & BACKGROUND



University City District (UCD) works to improve economic vitality and quality of life in the University City area of Philadelphia, by investing in world-class public spaces, addressing crime and public safety, and bringing life to commercial corridors. In 2011, UCD, working with the City of Philadelphia, installed the city's first Parklets. These temporary seating platforms, placed flush with the curb, created an extension of the sidewalk by replacing one or two parking spaces with a small new park. That dry definition though belies the strikingly vibrant little hubs of activity that these new public spaces have become in our residential neighborhoods and on our commercial corridors.

The Parklets have been remarkably successful at attracting users since the day they were installed. For noted urbanist William H. Whyte, when it comes to good urban spaces, "supply creates demand. A good new public space builds a new constituency. It stimulates people into new habits." That was clearly the case at the Parklets. From early morning to late evening, many Parklets were consistently occupied by people eating, drinking, socializing, or working. Photos showed up on

social media, and crucially, businesses reported impressive sales increases after their neighboring Parklets arrived. While these reports were compelling, and successful Parklets were being reported in San Francisco and elsewhere, our evidence for their positive impact remained anecdotal. Research on Parklets in New York City and Los Angeles had documented high levels of use in central business districts, but limited data, if any, were available on Parklet performance outside of downtowns and very high density neighborhoods, including:

- Their ability to attract and retain users;
- The diversity of their users and uses;
- Their impact on the sales at adjacent businesses; and
- The micro-scale environmental factors contributing to their success or failure.

In other words, how effective were Parklets at bringing more life to our public spaces and more feet to our neighborhood businesses, and could we use that information to predict whether a Parklet would be successful elsewhere?

During the 2013 Parklet season, UCD conducted an intensive data collection and analysis effort to answer these questions. This report contains those results, and as cities, suburbs and towns strive to improve their walkability and energize their public spaces, we hope that our findings can help other communities determine if Parklets are an appropriate urban design solution for them. As a relatively new form of "tactical urbanism," Parklets are still likely to encounter some resistance, particularly as they may require a minor loss of parking. It is our hope, however, that these data can help advocates make the case for Parklets as cost-effective enhancements to the urban streetscape and quality of life, and identify the locations in their communities where Parklets are most likely to succeed.

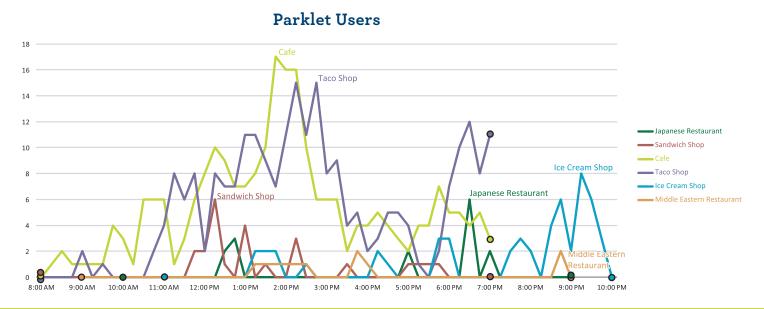


Many Parklets in University City are extremely popular, routinely filling all or nearly all of their seats at peak times

KEY FINDINGS

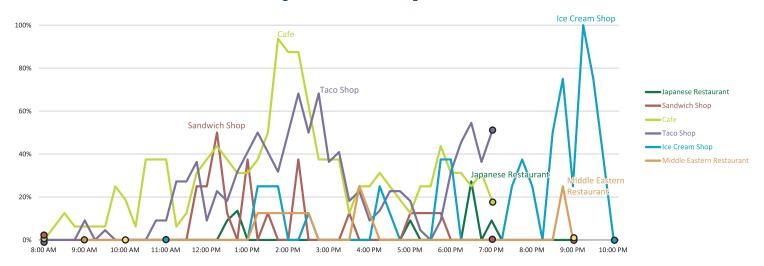
How Many People Use Parklets?

Parklets can attract an enormous number of users¹. At peak hours, busy Parklets can fill every available seat, or close to it (the number of seats ranged between 8 and 22 depending on the Parklet).



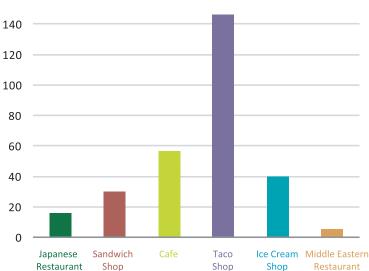
'The Parklets are referred to here by short descriptions of their adjacent businesses. Descriptions of the Parklet sites are included at the end of the report.

Percentage of Seats Occupied



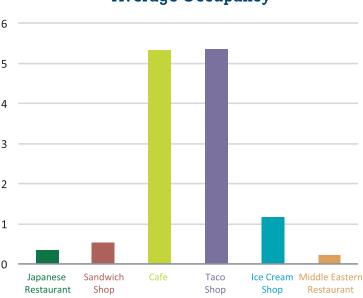
At a busy location like "Taco Shop," that translates into well over 150 unique users over the course of a day, all in the 240 square feet that could otherwise have hosted just one or two parked cars at a time. It is important to note that Parklets can achieve high occupancy rates by retaining customers who linger, for instance over their coffee and laptops at "Café," or by the rapid turnover of a larger number of customers stopping for a quick meal, as was the case at "Taco Shop." Either situation can therefore help to create a successful public space.

Total Unique Daily Users



The fact that Parklets are capable of filling nearly all their seats simultaneously suggests they are particularly popular with groups and/or that strangers often share tables (and their personal space) within these small footprint spaces. By concentrating so many users in these outdoor rooms, and juxtaposing them to passing pedestrians on the adjacent sidewalks, Parklets frequently became magnets for passers-by who slowed down or stopped to chat, squeezing onto the parklet or sidewalk, and adding to the palpable buzz of activity.

Average Occupancy

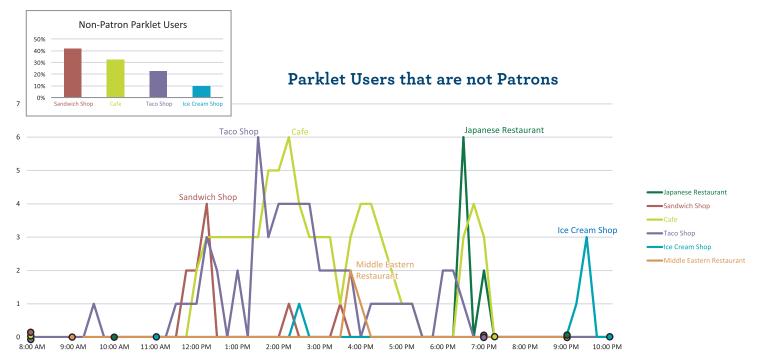


There was substantial variability in Parklet patronage. Parklet performance can be measured in multiple ways, but among the most useful is average occupancy, or the average number of users at any given time.

By that standard, two of the six Parklets, "Taco Shop" and "Cafe," substantially outperformed the rest, with use peaking at lunch and again in the late afternoon and early evening. Occupancy trends corresponded with the nature of the product mix, so "Ice Cream Shop" performed strongly in the late evening (when potential customers in that primarily residential neighborhood were home from work), and "Sandwich Shop" attracted a modest number of users at lunchtime. Based on average occupancy and the number of total users, only "Japanese Restaurant" and "Middle Eastern Restaurant" lagged in attracting users. In the case of "Japanese Restaurant," the inability to carry food out to the Parklet clearly hindered performance, and "Middle Eastern Restaurant" may have performed poorly for a number of reasons explored below.

Who Uses Parklets and What do They Do There?

Parklets are not just for patrons. A common concern is that Parklets may be interpreted by potential users as private space intended only for patrons of the adjacent businesses. In fact though, Parklets attracted a large number of non-patron users, with the busiest Parklets attracting the most non-patrons.



"Taco Shop" and "Cafe," in particular, attracted a large number of non-patrons (roughly 20%-30% of all users), and in so doing, also had an unanticipated impact on sidewalk vitality beyond the Parklet footprint.

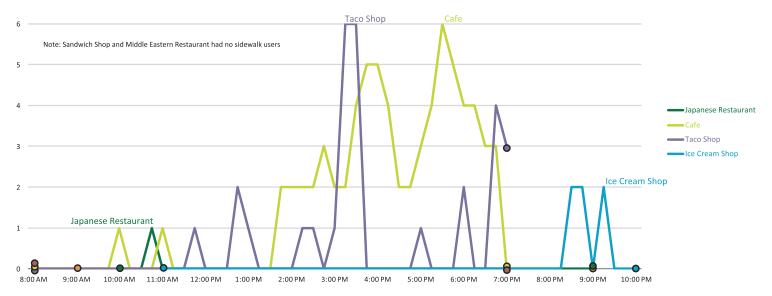
Parklets can have substantial spillover effects.

Both of the busiest Parklets attracted many "sidewalk users," or people who lingered on the sidewalk adjacent to the Parklet, for activities such as stopping to chat with Parklet users, further enhancing the vitality of the street. As William H. Whyte put it, "What attracts people most, it would appear, is other people." The Parklets were a strong testament to that simple but powerful observation.

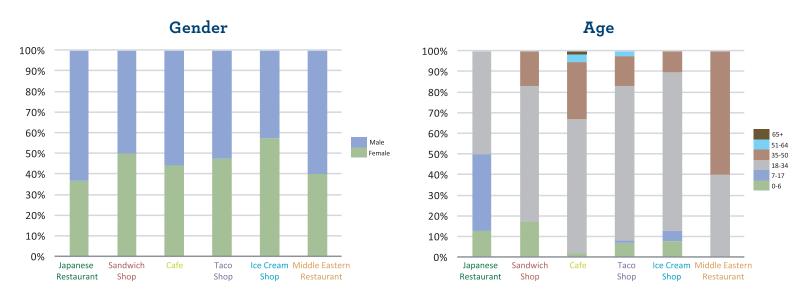


Parklet activity spills over onto neighboring sidewalks as people attract people in a virtuous circle, even as many users are not necessarily patrons of the adjacent businesses





Parklets appealed evenly to males and females, a good indication of women's comfort level in these spaces. It has been widely observed that women tend to be more discriminating arbiters of the quality of a public space, often being more hesitant to use a space that does not feel comfortable and safe. As William H. Whyte again put it, "women are more discriminating than men as to where they will sit, more sensitive to annoyances, and women spend more time casting the various possibilities." A strong female presence at these Parklets points to a successful space that feels at once both inviting and secure.



Users were overwhelmingly young, between the ages of 18 and 34. University City residents are disproportionately young – 52% are aged 20-34 compared to 26% in Philadelphia overall – and this was reflected in the ages of Parklet users.



Parklets are particularly successful at drawing younger users, including young families, especially when associated with complimentary uses, like a popsicle shop

Nevertheless, the Parklets clearly appealed to a disproportionately young audience, and in order to serve the neighborhood as a whole, both the choice of locations, and design decisions need to be carefully considered in order to attract a mixed audience.

The Parklets were remarkably social spaces. Eating and talking to other people were by far the most common behaviors at most Parklets.



By being ADA compliant, Parklets were also able to accommodate users with limited or impaired mobility.

"It is such a pleasure to witness all of the folks enjoying the parklet while eating and relaxing... It's a great place for impromptu meet-ups and eating with a neighbor. We always feel a twinge of sadness when the Parklet is tucked away for the winter."

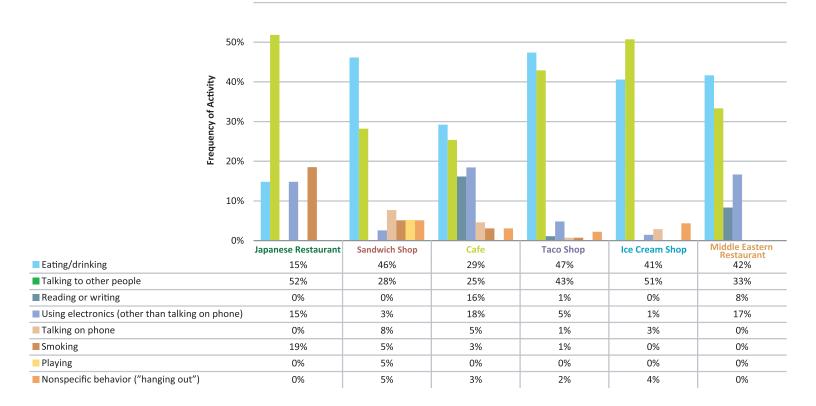




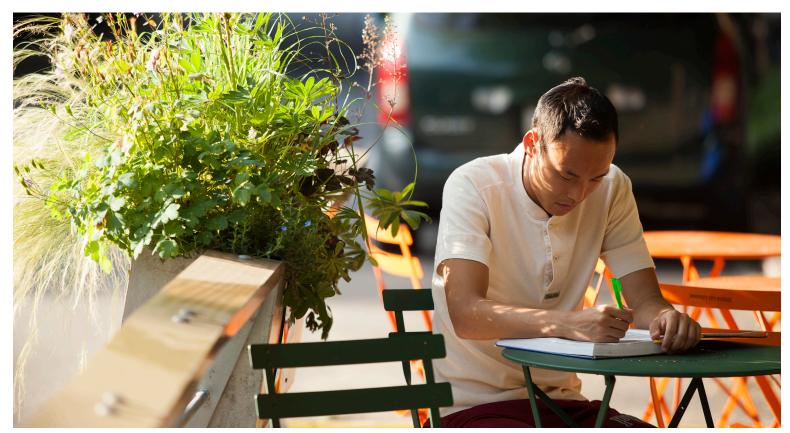


Parklets favor social behaviors including eating and talking to other people

Activities



Solitary behaviors, such as reading or writing, using electronics and talking on the phone were generally rare. The primary exception to this was at "Cafe," where a far higher percentage of users took part in those activities, as they generally did inside the cafe as well.



Parklets are largely social spaces, but also catered to solitary and quiet activities like reading or studying

The duration of parklet visits varied substantially between locations, due in part to differences in activities. At "Café," the median duration of stay was nearly 45 minutes, twice as long as at "Taco Shop," and more than five times longer than a visit to the Parklet outside "Sandwich Shop."

Median Duration of Stay 45 40 35 30 25 20 15



Generous plantings and brightly colored furniture catch the eye of potential users and create the sense of an oasis well buffered from the street

What is the Impact of Parklets on Neighboring Businesses?

lapanese

Restaurant

Sandwich

Parklet installation coincided with a substantial boost

Taco

Shop

Ice Cream Middle Fastern

Restaurant

in sales. The majority of host businesses were able to provide sales data for the one to two weeks preceding and following the installation of their adjacent Parklets². Among them, the sales impact of the Parklets was substantial: following the introduction of the Parklets, sales were up by an average of 20% (the number of transactions increased by an average of 17% at the two businesses reporting that additional statistic). Several of the reporting businesses had been in operation for less than one year, so it was not possible to compare the year over year change in sales. Based on the typical increase in sales, a new Parklet is likely to pay for itself after just one to two seasons, particularly when multiple businesses benefit from its presence and can share in the cost

It is important to note that with three major universities, University City is a neighborhood with a substantial student presence – roughly 54% of residents are college or graduate students. Because Parklet installation coincided with the end of the academic term, their positive impact on sales is almost certainly underestimated by these data. The fact that businesses with Parklets were able to weather the downturn normally associated with the end of term was, according to one Parklet host, "wildly impressive."

What Factors Determine a Successful Site for a Parklet?

Ideally, it would be possible to use the performance of these Parklets to better understand the external factors contributing to their success, and to thereby construct a set of objective criteria by which to screen future candidate locations. To that end, we constructed a matrix of factors potentially impacting Parklet performance, and scored all of the Parklets on the site characteristics in that matrix.

"Since the Parklet first arrived... we anticipate its arrival each spring as it is such a boon to our business and neighborhood. Not only does it provide extra seating for our small space, but it provides an atmosphere of community and neighborly engagement."

- Jeanne Chang, Parklet host

²Businesses providing sales data included: Café, Taco Shop (two adjacent businesses abutting Parklet), and Ice Cream Shop. The length of the sales comparison window depended on the data made available by the business.

Though the sample size was small, precluding tests for statistical significance, as an exploratory exercise we calculated correlation coefficients between each of these characteristics and two key performance indicators: average occupancy and unique users per hour³. We used the average value of those coefficients to group the site characteristics based on the strength of their association with Parklet success. Where an increase in the value of a site characteristic was correlated with an increase in Parklet performance, the association is shaded green. Conversely, where a decrease in the value of the characteristic is associated with improved performance, the characteristic is shaded red.

Site Characteristic	Direction of Association	Strength of Association
Customer turnover per interior seat	+	Very strongly associated
Building transparency (percentage of façade)	+	Strongly associated
Sidewalk width	-	Moderately associated
Presence of bicycle lane	+	
Presence of parallel parking (both sides of street)	+	
Population density (residents within 500 feet)	-	
Food conducive to onsite consumption	+	
Crime (robberies within 500 feet)	-	
Pedestrian volume	+	
Availability of takeout service	+	
Traffic volume	-	
Availability of shade	+	• Weakly associated
Street width	-	
Presence of bicycle parking	NA	Not associated
Interior seats	NA	
Pre-existing outdoor seats	NA	

Owing to the small sample size, the following results should be treated as preliminary, and any hypotheses would need to be supported by additional data collection and statistical testing. With that caveat in mind though, the results suggest that a few key parameters may be strongly or moderately associated with Parklet success. By far the best predictor of Parklet success was a characteristic of the host business: the customer turnover per seat (measured as the number of tickets per hour per interior seat). That is, businesses with high turnover, but modest interior seating capacity were clearly associated with strong Parklet use. The other strong predictor of Parklet success was its visibility from the interior of the host business via a highly transparent façade. In the case of the more successful Parklets, a façade that included large windows fostered a sense of connection between the business and the Parklet, a perception that was aided by narrow sidewalks, another moderately strong predictor of parklet performance.

³A correlation coefficient can be thought of as the strength of the association between the value of the site characteristic, and the indicator of Parklet performance.

Several of the other strongest predictors also paint a picture of successful Parklets as being located on streets that are comfortable both to pedestrians, and to anyone sitting at a temporary platform in the street. These factors include the presence of a bicycle lane and parallel parking on both sides of the street, buffering the sidewalk and Parklet from vehicles. "Middle Eastern Restaurant" in particular may have performed poorly in part due to low customer turnover vs. interior seating capacity, poor Parklet visibility from the restaurant interior, and high traffic volumes. Also associated with Parklet success is the presence of neighboring businesses whose products are highly consumable in a Parklet setting, such as businesses with takeout service and serving informal handheld food such as sandwiches and tacos.

Some site characteristics which might intuitively have been expected to impact Parklet success were not strong predictors, at least in this small sample. For instance, the presence of pre-existing outdoor seating did not negatively impact Parklet performance; Parklet seating may have served a slightly different, and complementary, function to existing seating. At the same time, it seems very likely that the abundance of pre-existing outdoor seating at "Middle Eastern Restaurant" was another contributor to its relatively weak performance, especially as that seating was generally fairly well utilized throughout the day. Interestingly, the amount of existing indoor seating itself had no measurable impact on Parklet performance; only in the context of customer turnover did that factor take on a crucial role.



A good public space offers more than one reason to visit, including integrated bicycle racks in many Parklets

CONCLUSION

There are few more difficult challenges in building walkable neighborhoods than overcoming the clamor for parking. But as architect and urbanist Jan Gehl said, "If people rather than cars are invited into the city, pedestrian traffic and city life increase correspondingly." Parklets, by their very nature, will almost inevitably contend with protests over lost parking, but the data presented here illustrate the enormous gains to neighborhoods and businesses that can result from the relatively painless loss of one or two parking spaces. For modest cost, well-placed Parklets can attract huge and diverse crowds, animating sidewalks and bolstering neighborhood businesses, while truly creating "places" where none existed before. Finally, the data suggest that the success of those new places need not be left to chance; rather, good decisions in siting can increase.



Supply creates demand: from the moment that Parklets were installed (and sometimes even before), they were remarkably successful at attracting users

SITE DESCRIPTIONS AND METHODS

The Parklets were all located on commercial corridors in primarily residential neighborhoods of row houses, semi-detached houses, and small apartment buildings in the University City section of West Philadelphia. "Japanese Restaurant" was located outside of a full service restaurant and adjacent to a small office space; "Sandwich Shop" was located outside of a convenience store and deli; "Cafe" was located outside a cafe serving coffee and light food; "Taco Shop" was outside a casual service restaurant serving tacos and burritos and a popsicle store, and adjacent to a casual service Korean restaurant; "Ice Cream Shop" was outside an ice cream store and adjacent to a take-out Chinese restaurant; "Middle Eastern Restaurant" was located outside a casual service Lebanese restaurant and juice bar.

User count and behavior data were collected at each Parklet on Tuesdays and Wednesdays in spring and summer 2013. Counts were conducted only on days with mild seasonal weather – days with high temperatures in the 70°s and 80°s with no precipitation. A UCD intern was stationed at the Parklet from 8:00AM (or from the opening time of the adjacent host business), and for the full duration of the business hours of the host business, except in the case of Taco Shop, where observations terminated two hours before a 9PM closing time. The intern recorded the arrival and departure time of each user, their gender and approximate age, whether or not they were a patron of the adjacent business, and the activities in which they participated (eating, talking, etc.). Site characteristics were recorded in spring 2014 and sales data were obtained directly from the host businesses. For the construction of the table of associations, the site characteristics were grouped by their strength of association with Parklet performance as follows: very strongly associated ($0.8 \le |r|$), strongly associated ($0.35 \le |r| < 0.8$), moderately associated ($0.15 \le |r| < 0.35$), weakly associated ($0.15 \le |r| < 0.1$).

For more information about this report and its accompanying analysis, contact **Seth Budick**, UCD's Manager of Policy and Research at seth@universitycity.org. UCD's parklets and other public space work is run by its Planning and Economic Development department, which **Prema Katari Gupta** directs. **Nate Hommel** manages parklets for UCD. **Daniel Wolf** contributed surveying and analysis to this study. **Matt Bergheiser**, Executive Director of University City District, encourages and enables all aspects of our work, however rigorous or playful.

UCD is grateful to its many partners and collaborators without whom parklets would not have been possible: Councilwoman Jannie Blackwell; Rina Cutler, Deputy Mayor of Transportation and Utilities; Andrew Stober, Chief of Staff at the Mayor's Office of Transportation and Utilities; Cara Ferrentino, Planner/Analyst at the Mayor's Office of Transportation and Utilities; Ariel Ben-Amos, former Planner/Analyst at the Mayor's Office of Transportation and Utilities; Joe McNulty, who was UCD's project manager for the original parklets; Jules Dingle, DIGSAU; Mario Gentile, Shift Design; Bill Curran, Bill Curran Design; Shawn McCaney, William Penn Foundation.



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