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Learning to Share: Outdoor Commercial Spaces on San Francisco's Valencia Street

Authors: Michael Montilla and Tyler Pullen

Abstract

During the COVID-19 pandemic, the City of San Francisco sanctioned the use of public space on sidewalks and parking spaces for commercial purposes as part of their Shared Spaces initiative. Combined with streamlined permitting processes and an iterative rollout of design guidelines and inspections, the program facilitated a rapid and large-scale shift in the city's streetscape. Using the Valencia Street commercial corridor in San Francisco's Mission District as a case study area, we present a preliminary typology of "outdoor commercial spaces" (OCS) based on the degree of enclosure as a potential signifier of different patterns in use and perception of public space. We interviewed city residents and other stakeholders to explore emergent themes in the perception of OCS, complemented by pedestrian path tracing along different sections of Valencia Street. Our findings indicate that differences in the degree of enclosure in OCS on Valencia Street partially reflect their diversity in use and business type. The interview feedback also suggests that individuals across several stakeholder groups generally believe OCS represent an improvement to public space even when more enclosed OCS may imply the privatization of public space. Additionally, pedestrian behavior while the street was closed to vehicular traffic implies that the street closure is an important complement to OCS that maximizes the potential benefits of an activated streetscape while mitigating the negative effects and perceptions of privatization. However, these changes may amplify existing patterns of inclusion and exclusion in public spaces on Valencia Street. Especially as many OCS become permanent fixtures of San Francisco's streets, their design and purpose have important implications for street-level accessibility and city-wide equity for small businesses. These dynamics – and the OCS themselves – are likely to continue evolving during the transition to long-term guidelines and implementation.

Acknowledgments

We would like to thank the many generous folks that gave their time and thoughts to our research, without which this paper would not exist. In addition to those we interviewed formally and informally for the project's substance, we thank Professor Zachary Lamb for his guidance and suggestions throughout the project, and our fellow students in UC Berkeley's Research Methods in Environmental Design class. We also thank the anonymous reviewers whose comments dramatically improved the paper and our own understanding of the project.

Introduction: Why Study Streets?

There are many different ways to study cities. Mirroring the rise of data science methods, contemporary urban research often leverages massive datasets to infer general trends across cities or neighborhoods. At the same time, more culturally motivated research may find its focus in deep ethnographic analysis of singular communities or social groups. Geographic information systems have revolutionized the application of spatial data, and policy researchers have volumes of public documents and briefs to inform their work. While the variety of methods at the disposal of urban research may expand by the day, there are ultimately two main ways to explore the urban space: from an all-encompassing perspective, or from the streets.

French philosopher, Michel de Certeau (1984), discussed these perspectives as the two primary ways to know a city. To him, knowing a city from an all-encompassing perspective is informative and useful, but learning about a city from the perspective of the streets imparts a special kind of understanding that one cannot get in any other way. He wrote about streets as a place of "Pedestrian Speech Acts", where knowledge about the city and urban life is shared and passed on not only through the form of streets and their arrangement, but through the act of walking as well. He wrote, "The act of walking is to the urban system what the speech act is to language or to the statements uttered (de Certeau, 1984, 97)". The way people walk through and interact with the street tells the stories of the city. Exploring people's paths and creating paths of your own informs research unlike any other activity. It can uncover overlooked social dynamics, highlight injustices and inequities, or simply shine a light on restaurants and other establishments that are simultaneously hidden gems and neighborhood institutions. To study streets is to study the city in a fundamental way.

Contemporary debates concerning urban streets relate to this present study in two main ways: (1) a growing recognition of the street as an appropriate place for a mix of uses and activities, and (2) unresolved concerns over streets as a nexus where public and private domains unite.

Historically, streets in the United States had multiple purposes, but the popularity of the automobile converted streets to places dedicated to mobility. Historian Kenneth Jackson (1985) pointed out how streets used to fulfill a different social function than they do today. They were places of recreation, where children might play, and where the automobile was seen as a nuisance. But by the 1920's, municipal governments were repaving streets specifically for automobiles. Streets became places solely meant for travel. He wrote, "No longer a market place or the scene of informal social interaction, the street was becoming a place where movement was paramount and the motorcar was King (Jackson, 1985, 168)." City streets held on to their various purposes more than suburban or rural roads, but nearly all American thoroughfares prioritized automobiles.

Within the last 30 years, some U.S. cities have returned to treating streets as though they have multiple purposes. Concepts such as transit-oriented development, complete streets, active mobility, and New Urbanism have become popular among the general public and many municipal administrations (Gregg & Hess, 2019; Garde, 2020; Mehaffy & Haas, 2020). As such, streets in many cities across the country have been restructured to facilitate multiple forms of mobility including bicycling and transit. Streets have had lanes taken away from cars to expand open areas for pedestrians and other citizens on foot, and more recently, an increasing number of cities have begun to allow urban businesses to utilize public areas along their frontages for the installation of

structures such as outdoor dining areas or commercial displays. San Francisco's main downtown corridor, Market Street, is an example as it permanently closed to privately-owned vehicles in 2020, prioritizing public transit and bicycle travel instead. All these transformations give the street renewed purpose as they become places for human activity once again. They remake streets into what they had been for most of history, truly public space.

Many planners see these transformations as highly beneficial for cities, residents, and even the global climate. On the scale of the city itself, these changes are often seen as a restored source of urban vitality. To Annette Kim, one of the best qualities a street could possess is the flexibility to allow for multiple purposes. Writing about mixed-use sidewalks, she stated, "[A sidewalk] is where different classes of people are more likely to mix. It is a place that could potentially support the livelihood of large numbers of people in a way that provides benefits to society. Mixed-use sidewalks, as much as mixed-use land parcels, are part of what makes a city vibrant and contributes to civic life (Kim, 2012, 235)" To her, having a variety of outdoor uses along the street gives people from different backgrounds places to interact. It spurs economic activity and creates the prospect for people to support themselves. In short, it contributes to the city as a place of life and opportunity and encourages residents to take ownership of their city.

But these activities bring a private element into the public realm, and there are serious reasons to worry about encouraging private uses in public space. In the famous passage where she introduces the concept of "Eyes on the Street", Jane Jacobs (1961) highlighted the importance of, "...[A] clear demarcation between what is public space and what is private space (35)." For Jacobs, the delineation between the public and private signal to all residents the areas in which they are jointly responsible for. Another concern comes from neoclassical economics which calls for clearly defined property rights or else the improper use of public areas will accrue externalities and create other inefficiencies. Moreover, at the level of the street, areas that feature both public and private qualities, such as privately owned public spaces, often see private actors misuse or skirt public regulations for their benefit (Kayden, 2000). While there may be issues that arise from the meeting of public and private dimensions, a growing number of cities are willing to make it more acceptable for streets to be places where the public and private intersect.

Ultimately, it is crucial to recognize the potential for streets to be sites of contestation and exclusion. As a form of public space, streets are claimed by different groups for different purposes which regularly conflict. Such conflicts often enter broader awareness as commercial interests strive for control over public space. Loukaitou-Sideris and Ehrenfeucht (2009) detail how these interests, namely *business improvement districts*, have normalized the privatization of sidewalks and affected the regulation of public space with exclusionary results. They also discuss how municipal desires for pedestrian scale commercial streets can lead to gentrification, and limit participation to populations and activities that businesses or politicians believe support the street's commercial character. In time, these public streets seemingly become more private as controlling forces restrict an increasing number of uses and users. Simply put, commercial interests have gained greater control of public streets over the last few decades, and the number of public activities that are allowed to occur in these spaces has dwindled.

U.S. cities continue to evolve in the wake of pandemic-related changes and uses, and planners and researchers should assess how it may permanently alter our relationship with public spaces in

general, and streets in particular (Honey-Roses et al., 2020). The street, much like the city, has special potentials, vulnerabilities, and purposes. As streets change, cities change, and San Francisco expanding street uses in response to the COVID-19 pandemic provides a unique opportunity to study streets and their purposes in this moment of transition.

A Brief History of Streetscape Conversions in San Francisco

The idea and practice of converting the public streetscape in San Francisco is not new. One of the first and most impacting examples was in 2005, when an urban design studio, Rebar, converted a parking space in San Francisco's commercial downtown. They did so through informal means, paying the parking meter for the day and laying out temporary features like artificial grass, a planter, and a bench. Despite this informality, they found that numerous people used the space throughout the day, and gained enough publicity and popularity that other organizations in other cities sought to create similar installations in an annual event named "PARK(ing) Day", the general intent being to explore more creative and engaging uses of public spaces dedicated to street parking (Schneider et al., 2017).

The City of San Francisco sought to formalize a process for installing similar conversions as part of the SF Better Streets programming in 2010. The program was designed for a broad range of improvements to the streetscape that prioritize pedestrian mobility and activity while also improving stormwater management and other streetscape elements. The parking space conversions – termed "public parklets" – allowed for a project sponsor (often a retail space with ground floor street frontage) to construct a permanent structure in the parking space(s) in front of their business. The project sponsor would pay for the installation and maintenance of the explicitly public space, with small concessions such as the allowance of a degree of "branding" the space (with design features that match the primary structure, like in color or theme). But use of the space for any commercial purpose (e.g., serving customers sitting in the parklet) was not allowed. The design guidelines were relatively flexible and procedural components such as community engagement were strongly encouraged but not required. Before the pandemic, San Francisco had more than sixty of these public parklets, with four on Valencia Street between 14th Street and 24th Street.

The Shared Spaces Program

In the summer of 2020, the Shared Spaces program began, allowing and encouraging the expanded use of public spaces for commercial purposes. The intent was to aid businesses – especially dining establishments dependent on in-person and indoor, mask-less interaction – that struggled to operate through the stay-at-home measures. This marked a fundamentally different purpose and use than the existing parklet program. As such, the initial guidelines for design and use of these conversions were loose: minimum requirements for open air ventilation, sufficient space for socially distant gathering within the structures, and the preservation of at least six feet of pedestrian throughway on the sidewalk. In addition, the City of San Francisco committed to a three-day review for new permit applications and retroactive inspection so that as many businesses as possible could take advantage of Shared Spaces, as quickly as possible. Simultaneously, the program allowed for the partial and temporary closure of streets to vehicular traffic, especially during times of peak pedestrian activity on weekends. This was meant to further encourage the expansive use of public street space in a safely socially distant manner. Street closures for Shared Spaces – distinct from

the simultaneously active "Slow Streets" program, which applied only to residential streets – required project sponsors as well, with the level of organization often varying by the scale of the closure. Sponsorship entailed installation of the temporary barriers and respective staffing requirements as well as enforcement of the public compliance with the adjusted rights of way. Some – often those for minor alleyways – were sponsored by individual businesses, while others were organized by larger merchant associations and applied to more major corridors.

In its short time, the Shared Spaces program (and Shared Spaces themselves) has been defined by iteration, improvisation, and uncertainty both externally and internally. Externally, following state and city guidelines tracking the rises and falls in COVID-19 cases and recurrent stay-at-home orders, the program and spaces themselves paused and restarted multiple times. Internally, as more city agencies such as Public Works and the Fire Department became more actively engaged with review and inspection of Shared Spaces, iterative updates were made to the design requirements. One example is the added requirements on behalf of emergency services access, setting a minimum three feet of open access to the building frontage for every 20 feet of "Shared Spaces", as well as visibility of the building address from the street. Despite these changes and the resulting uncertainty, over 1,900 permits were issued for Shared Spaces applications. And beyond the changes in regulation, the businesses themselves made iterative improvements and additions to their outdoor spaces over time as well.

In March of 2021, the Mayor of San Francisco announced legislation to make elements of the Shared Spaces program – particularly, the outdoor commercial spaces – allowable for permanent inclusion in the streetscape. The legislation went into effect in 2022 and standardizes many of the guidelines established earlier in the pandemic. This includes a commitment to a 30-day review period for city staff and some additional design limitations to ensure visibility, airflow, safe fire department access, and structural stability. Compliance to the new standards had to be met by July of 2022, with a new permit fee structure to begin in April of 2023. The city expects its regulations and procedures to continuously evolve based on feedback and still-emerging lessons from implementation.

Research Questions and Design

First, a note on definitions: we introduce the term *Outdoor Commercial Spaces*, or OCS, to refer to the conversion of public street space for exclusively commercial uses during the pandemic. This is distinct from existing *parklet* conversions, in which the space remained officially public at all hours, and did not allow any commercial use. OCS is also distinct from the "Shared Spaces" terminology, which can refer to a broader range of potential interventions, including street closures, and "commercial parklets" (introduced by the City of San Francisco), which is complicated by their sanctioned commercial exclusivity (i.e. non-public use).

The guiding question behind this project was: *How has the conversion of outdoor space during the COVID-19 pandemic transformed public, municipal, and commercial use and perceptions of public space?* To supplement our primary research question, we also explored the extent to which Shared Space conversions (including street closures) established and authorized the expansive use of public space for private purposes and how differences in the design of OCS obscured or contributed to this tension.

Case Study Area: Valencia Street in the Mission District

We chose Valencia Street in the Mission District of San Francisco as a case study area. Valencia Street – principally, the segment between 14th Street and 24th Street – is a prominent mixed-use commercial corridor. It features a high concentration of businesses, including cafes, restaurants, bars, and other retail shops and services. Fittingly, there was a large number and diversity of OCS across the study area – more than 70 directly on the segment studied – allowing for comparison between the perceptions and uses of different designs and functions. Furthermore, the Valencia Corridor Merchants' Association received permits for street closures along three blocks of Valencia Street during certain hours on Friday, Saturday, and Sunday: 16th to 17th Street, 18th to 19th Street, and 20th to 21st Street. The block-by-block variation expanded the comparative features, adding richness to our observations and findings. Valencia Street simultaneously serves as a physical and symbolic boundary in the ongoing, complex changes to the Mission District more broadly, whose historically immigrant and working-class residents continue to face multi-faceted social and economic pressures (Graf, 2021; Hom, 2021; Garfoli & Said, 2015). It serves as a dividing line between census tracts within the neighborhood (as defined by the City), as Mission census tracts west of Valencia have a lower proportion of Hispanic-identifying residents, residents with higher median incomes and average educational attainment, and lower rates of renters. ¹ In many ways, these features make Valencia Street an exceptional case and limit the generalizability of our study. However, because of that very same exceptionality, and the complexity of features that comes from the unique context, the case study choice lends exceptional insight as well.

Methodology

The primary method of research was systematic observation of the case study area: of the OCS structures and designs, of pedestrian activity, and of general uses along Valencia Street, both public and private. Over the course of the study, over 100 hours of field observation were recorded. For observations on the OCS themselves, we assessed differences in design (such as materials used or the height of the walls) as well as ancillary features such as the installation of lighting or planters. Observations were recorded during varying days and times, both when street closures were active and inactive. The list of variables observed evolved over the course of the study, adding and excluding extraneous features as necessary based on the perceived relevance from observations and interviews. Many variables were included in order to assess trends involving the influence of specific features on the use and perception of OCS by different stakeholders. Lastly, we procured supplementary data from secondary sources, including permitting information from the City of San Francisco Planning Department as well as publicly available information on the businesses themselves (often from their websites).

Interviews (and Interveys)

To complement the general observations, we conducted a series of semi-structured interviews with various stakeholders on and around Valencia Street. This included 20 walking interviews of San Francisco residents along Valencia Street between 16th Street and 24th Street, stopping to

¹ See Appendix for tract-by-tract variation across Valencia Street in these metrics.

highlight exceptional OCS, behaviors, and uses along the way. We sourced interviewees through two rounds of snowball sampling from friends and colleagues outside the urban planning profession. We did not collect personal information from respondents to protect anonymity and avoid treating their demographic information as a data point. Nonetheless, we know that respondents ranged from approximately age 18 to 50, from roughly 40 percent to 200 percent of San Francisco's area median income, and with a roughly equal number of men and women. The majority of them had less than five years of residence time in San Francisco, but roughly one third of them have lived in San Francisco for at least 10 years, and all but one of them lived within three miles of the study site at the time of interviewing. The intent of these interviews was not to collect a fully representative sample of residents, business owners, or any other stakeholder groups. Instead, the purpose of the walking interviews was to explore and unpack prominent and emerging dynamics in the perception and use of OCS and street closures on Valencia Street. As such, we refrain from summarizing respondent insight quantitatively in this paper.

One dozen additional interviews were conducted with business owners along Valencia Street, city officials with knowledge of the Shared Spaces program, and a number of staff from neighborhood organizations in and around the Mission District. Lastly, we conducted roughly two dozen "interveys": a self-styled hybrid method with the anonymity and brevity of a survey but the openended and in-person nature of an interview. These (unscheduled) interveys of patrons and pedestrians along the Valencia Street corridor provided validation and supplemental information to the other interview data.

All observations and interviews took place between March and June of 2021.

Path Observations

We observed pedestrian pathing to assess how pedestrians passively engage with OCS and their surroundings. Inspired, in part, by a study completed by Jan Gehl (1968) in which he observed and documented by sketching the paths taken by pedestrians crossing Blågårds Square in Copenhagen, we designed a method in which we observed and recorded the paths taken by pedestrians as they approached selected OCS on Valencia Street. We performed all the observations during scheduled weekly street closures and approximated the paths of pedestrian groups (two or more pedestrians walking together) by hand on diagrammatic representations of each site. The diagrams also record the relative locations of related site furniture and the layout of cordoned off areas.

We selected six specific observation sites for observations (see Figure 1). Each observation site was made up of one or more OCS structures, and each one was selected with three goals in mind: (1) We wanted to include locations on both blocks open and closed to motor vehicle traffic during the regularly occurring street closures. (2) We wanted to include sites made up of different OCS types (such as simple OCS without much decoration, or OCS whose physical structure expands during street closures). And (3) we wanted to include sites made up of different types of OCS groupings such as longer series of multiple OCS, or standalone OCS.

Site 1 (Corridor)

Valencia Street from 16th to 24th Street

Site 3 (Open Block)

Site 6

Observation Site
Other Shared Spaces Permit Locations

Figure 1. Path Observation Sites on Valencia Street

Map base layer from the City and County of San Francisco (2021d)

We collected the path observations four times at each site (24 observation periods in total). Each observation period was ten minutes long. Two of the observation periods at each site were performed during Sunday lunchtime street closures (observations occurred between 12:00 and 14:00), while the other two were performed during Saturday evening street closures (observations occurred between 18:00 and 21:00). For each pair, one observation period tracked northbound pedestrians, while the other tracked southbound pedestrians. Only pedestrians who entered the observation area traveling in the specified direction were recorded. Furthermore, pedestrians traveling on the sidewalk opposite of the OCS specified for each site were excluded as well.

In total, we performed 663 individual observations representing 1153 pedestrians (See Table 1). The largest group of pedestrians was made up of nine people, and the mean group size was 1.74 people. The number of path observations at any site ranges from 66 observations (at Site 5) to 150 observations (at Site 4).

Table 1. Path Observations Summary Data

Block Type	Open	Closed	All
Observation Sites	2	4	6
Observations	179	484	663

Findings

The OCS installations along Valencia Street have many diverse design features that we used to develop a list of potentially meaningful variables affecting their perception and use. For example, we noted the presence of tables and/or chairs, lighting fixtures, and heating sources; the types of materials used; visible commercial branding. Over the course of early walking interviews and observations, however, we found the most substantive and easily categorical differences between OCS was the degree of enclosure. Reflecting explicit comments from early interviewees about the presence and degree of enclosure that marked their change in perceived use, we arrived at a basic typology to capture the different enclosure types on Valencia Street OCS (see Figure 2 below). The typology is an ordinal scale with four steps of increasing degrees of enclosure.

Figure 2. OCS Typology

Type 1: No walls or roof



Type 2: Partial walls, no roof



Type 3: Partial walls and roof



Type 4: Full walls and roof



Images are of Valencia Street OCS and taken by research team

As with most typologies, there are exceptions to and hybrids of the above categories. A common example is a business with a Type 3 or 4 (built and enclosed) structure that expands its footprint with additional tables on the sidewalk or excess street space, particularly while the street is closed to vehicular traffic. The typology is thus presented as a useful analytic emerging from observation and interview comments rather than as an all-inclusive boundary for the still-evolving diversity in design approaches for OCS. In particular, these categories served as a strong correlate with perceptions of privatization or exclusionary design which is helpful for exploring the themes of this project.

The typology was also helpful because of the spread of OCS types on Valencia Street, specifically. Within the study area – Valencia Street between 14th and 24th Street – we observed 72 OCS from businesses along the corridor, with Figure 3 below showing the count of OCS in each typology category. A manual count of the commercial frontage numbered 180 businesses, implying roughly two out of every five businesses in that section of Valencia Street took advantage of the ability to expand into the street space by the spring of 2021. Note that not all OCS observed (which included instances of chairs and tables temporarily extended into the sidewalk and street space) were necessarily permitted under Shared Spaces programming.

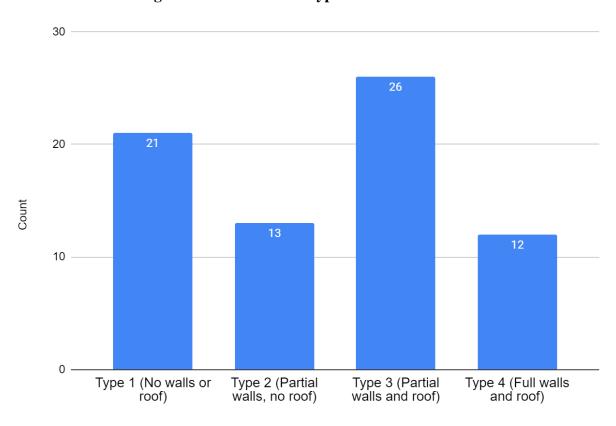


Figure 3. Count of OCS Types on Valencia Street

Type assignments from observation according to categories in Figure 2

The variety in OCS types allowed for similar variety in the observations and feedback from respondents. Combining the observational and interview data across this spectrum of OCS types revealed five primary findings explained below.

Finding #1: OCS form follows OCS function

In observation and through walking interview comments, it became apparent that OCS tend to replicate the experience offered by normal (pre-pandemic) business operations that would typically be conducted in interior spaces. In other words, the form follows the function for many OCS on Valencia. For bars and restaurants, which tend to serve customers for extended periods of time well into the night hours, OCS tended towards built-up and enclosed structures that provided more

privacy and protection from traffic and the elements. As a reflection of this, 8 of the 10 bars and 27 of the 38 restaurants along the corridor host type 3 or 4 OCS. Businesses with shorter customer interactions such as cafes or non-dining retail, meanwhile, favored more modest OCS with less permanent structures, with 21 of 24 businesses in these categories using type 1 or 2 OCS. The business owners we talked to confirmed function-focused design intent reflected by this trend. In this way, OCS on Valencia tend to extend the existing commercial profile into public space – or "lend a vibe to the street" as one interviewee described – rather than default to maximally enclosed and privatized spaces.

Finding #2: Many respondents believe that OCS broadly improve the public streetscape

This research does not attempt to collect or imply a representative sample of interviewees across social and economic demographics, but a large number of our respondents believed OCS to be an overall improvement to Valencia's streetscape. A large number of interview and intervey respondents across stakeholder groups (in our limited sample pool) commented in open-ended questions that the OCS on both open- and closed-street blocks made the entire corridor feel "lively" and "vibrant", and that they "give the street a sense of community" (with a majority using at least one of those phrases, explicitly). Similarly, many noted a positive sense of community and social activity made visible by the extension of patrons into the sidewalk and street space. To the extent that they could imagine the world "after" COVID-19, many respondents believed these changes to be improvements even after the pandemic.

Regarding the variety across our OCS typology, several walking interviewees reported that a higher degree of enclosure increased the perception of the privatization of public space. Comments to this effect implied that many would feel more comfortable sitting at type 1 and 2 OCS despite not purchasing anything, while they would not feel equally comfortable doing so in type 3 or 4 OCS. However, many of the same respondents described type 3 and 4 OCS in a positive light as an expansion of visibly social space, and appreciated the intuitive alignment between the design and function. For example, one business owner with a type 2 OCS supported their neighbor's adjacent type 3 space, saying "that's their vibe, that's what works for them, and it definitely adds to the sense of place for the whole area." Very few described the larger, more built-up OCS as jarring or evident of exclusionary commercial encroachment into public space.

Another element of the positive perception of OCS was that the variety in and of itself was valuable. While some respondents expressed preferences for certain design trends over others, many *more* said that the variety of OCS types added architectural articulation and a visual diversity of uses that made the entire corridor "more engaging", "active", and "interesting" (quotes shared across several interviewees). Several celebrated the benefits to people watching across different OCS types, with one respondent summarizing the sentiment well: "They're all complementary."

It is important to note that many individual preferences of varying specificity were evident. Some thought type 4 OCS offered more personal safety from pedestrians and vehicles, as well as insulation from noise, wind, and rain. Others thought the openness of type 1 and 2 OCS were safer because of their improved lighting and open sight lines, reminiscent of Jane Jacobs' "Eyes on the Street" concept. As for aesthetics, some respondents praised highly "manicured" OCS, such as those with materials and finishes (e.g. colors and design flares) that matched the primary business,

adding legibility and "fitting in" with the existing streetscape. A similar number of others pointed to the same examples as evidence of commercial overreach into the public realm, and instead preferred OCS that were "store-agnostic". There are many other conflicting opinions, even internal to the same interviewee in many cases. Such idiosyncratic preferences imply that, despite their perhaps-general appeal, the iterative and adaptive nature of OCS in the improvisational pandemic context may be an important element of their long-term popularity.

Finding #3: The importance of street closures

At the outset of this research, our primary focus was on the OCS themselves. But one of our key findings relates to another component of the Shared Spaces program: the closures of the street to vehicular traffic. We found that without the street closures during peak hours, many of the public benefits of OCS would be dampened and the concerns they generate would be intensified.

The importance of the street closures for OCS can be seen in three main ways: (A) the street closures allowed for greater flexibility and mixed-use of the street. (B) The street closures facilitated or encouraged OCS permitting and operations. And (C) the street closures mitigated some of the effects that OCS may have had on the privatization of the public sidewalk.

A) Street closures allow for greater flexibility and mixed-use of the street.

Mobility vs. Commerce

On one level, there is tension between the mobility uses of the street (including the sidewalk) and commercial uses, but street closures allow for both mobility and OCS-related commerce. Sidewalk-facing OCS of types 2, 3, and 4 (which take up one or more parking spaces) require sidewalk pedestrians to enter what many walking interviewees described as a commercialized space, characterized by minor but noticeable inconveniences like avoiding wait staff from restaurants and having to walk single-file if in a group. But the street closures allowed pedestrians to avoid the commercialized sidewalk by walking in the roadway. The results of this study highlight this in two tangible ways.

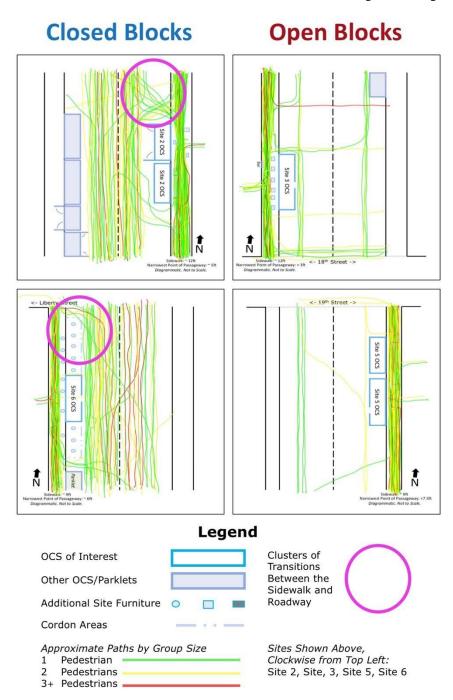
First, a much larger share of pedestrians continued on the sidewalk between OCS and their respective building frontage – OCS *corridors*, arguably a commercialized space – on blocks open to vehicular traffic compared to blocks closed to traffic. On blocks open to traffic, 89.39% of pedestrian groups continued through an OCS corridor, while only 40.91% did so on blocks closed to traffic. Likewise, on open blocks, 85.47% of pedestrian groups kept exclusively to the sidewalks even when congested by OCS activity (avoiding any diversion into the roadway), while just 37.19% of groups did so on closed blocks (see Table 2).

Table 2. Proportion of Pedestrian Behaviors by Block Type (n=663)

Block Type	Open	Closed	All
Pedestrian groups walking through OCS corridor	89.39%	40.91%	54%
Pedestrian groups using sidewalk only	85.47%	37.19%	50.23%
Pedestrian groups diverting from sidewalk to roadway	2.5%	9.26%	7.43%

The second way the results highlight pedestrians' ability to avoid commercialized sidewalks during street closures is through the clusters of transitions that occurred as pedestrians approached OCS. The results show that a greater share of pedestrian groups diverted from the sidewalk to the roadway on streets closed to vehicular traffic (Table 2), and they tended to transfer as they got close to the initial OCS in the observation area. As exemplified in Figure 4 (below), pedestrian groups that transitioned from walking along the sidewalk to walking within the roadway typically did so as they neared OCS on blocks closed to traffic. This pattern (or cluster of transitions) is not present in the path observations from OCS located on blocks open to traffic as transitions on these blocks more often occurred further away from the entrance into an OCS corridor at locations where a gap between parked cars or other obstacles allowed for it. On these blocks, the people who did transfer off the sidewalk generally crossed the entire street or kept to the bike lanes skirting parked cars instead of freely using the roadway. The difference between these two patterns of pedestrian behavior suggests that the observed pedestrians made choices on whether to walk through OCS corridors as they closely approached them; they might do so to "window shop" or to better assess where they want to eat or drink. On blocks closed to traffic, pedestrian groups could readily avoid the OCS corridor if desired, walking in the roadway instead. But on blocks open to traffic, pedestrians had limited ability to avoid OCS corridors because of the auto traffic using the roadway.

Figure 4. Clusters of Path Transitions on Closed Blocks Compare to Open Blocks



Another way the results show how street closures alleviated the tension between mobility and commerce purposes is the considerably lower pedestrian "conflict" rate on blocks closed to traffic (i.e. when at least one pedestrian needs to pause or divert their path to avoid running into another). Both the structures and operations of OCS narrowed sidewalk passageways, increasing the chance of pedestrian conflicts, and effectively limiting mobility. This happened regardless of OCS type. However, the observation data suggests that closing the block to vehicular traffic allowed for

pedestrians to avoid most conflicts by walking in the road (See Table 3). In simplest terms, we observed over five times the rate of pedestrian conflicts on blocks open to vehicular traffic compared to those closed to vehicles. By freeing up the street's roadway for pedestrians, OCS's negative impact on pedestrian mobility was reduced. This was corroborated by many walking interviewees, one of which claimed to walk in the street "whenever possible... to stay out of the way" of the eclectic sidewalk activity.

Table 3. Observation per Conflict Rate by Block Type (n=663)

Block Type	Open	Closed	All
Observations per Conflict Rate	4.16	21.04	10.05
Observed Likelihood of Conflict per Pedestrian Group	24.02%	4.75%	9.95%

Mobility vs Street Activation

The street closures also relieve the tension between mobility demands and street "activation". The existing commercial and lively nature of Valencia Street (as described by many city residents we interviewed) attract various forms of street activity both on the sidewalk and in the road. These activities, such as musical performances, dancing, playing tag, or working out often take up considerable space, but street closures enable these active uses while preserving a high level of mobility for pedestrians, those with mobility constraints, bicyclists, and micromobility users. The mix of uses enabled by street closures can be seen in the heterogeneity of paths taken by pedestrians at sites on blocks closed to vehicular traffic, most notably Site 4 (See Figure 5). The variety and irregularity of paths at Site 4 represent observations including children who played in the street as their group walked along the roadway, people who walked around a musical performance, and other people not necessarily using the street for mobility (such as those simply choosing to spend time along Valencia St.). In contrast, the nearly linear paths typically represent groups using the street primarily as a means of mobility. If these blocks remained open to vehicular traffic, such a variety of uses would be impossible outright without major safety hazards.

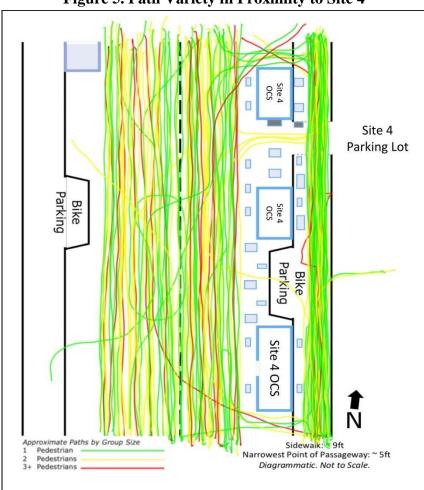


Figure 5. Path Variety in Proximity to Site 4

B) Street closures may facilitate or encourage OCS permitting and operations.

The importance of street closures was also evident through their association with OCS permitting and use. Permitting data from the City of San Francisco (2021c) indicated that street closures may encourage businesses to apply for OCS permits (see Table 4). In total, 60% of Shared Spaces curbuse permits and pending permits (including OCS) from the study area were on blocks with street closures despite the fact that only 3 of the 8 blocks in the study area had weekly street closures. While it must be noted that the blocks with closures had more restaurants, bars, and cafes than the average block on Valencia Street, nearly all the OCS permits were issued *after* the reoccurring street closures began in summer 2020 (City of San Francisco 2021c).

Table 4. Shared Spaces Curb Use (OCS) Permits by Block Type

Block Type	Open	Closed	All
Number of <u>Shared Spaces</u> Permits	23	34	57
Proportion of <u>Shared Spaces</u> Permits	40.35%	59.65%	100%

Furthermore, some OCS were fully deployable only *during* street closures. For example, one of the businesses with an OCS at Site 2 could open their OCS's walls outwards into the bike lane only during street closures without interfering with bicyclists. In this case, the street closure enabled the full use of the OCS structure. Other OCS expanded outside of their built-out structures with additional chairs and tables when needed and only while the streets closed to vehicles.

The street closures also enabled the safest use of OCS by reducing the possibility for motor vehicle involved accidents. On Valencia Street, the street closures during Friday evenings and weekends facilitated safety by removing passing vehicles from the street during times when OCS are at their busiest.

C) Street closures mitigate some of the exclusionary effects of OCS on the sidewalk.

Finally, street closures played a critical role in mitigating any negative impact on the public's "ownership" of the thoroughfare, particularly in regards to the rights of way on the sidewalk. Ongoing news coverage cites concerns that Shared Spaces and similar programs may lead to the privatization of public space, and street closures may indeed encourage attempts to exclude non-patrons from the sidewalk. This could be seen at the southern end of Site 1 where a bar/restaurant deployed a roped-off cordon area during street closures. When fully set up, the sidewalk passageway was blocked except for a small gate with signs that seemingly indicate the bar/restaurant's exclusive use of the sidewalk (see Figure 6). The sign, which was at the edge of a series of consecutive OCS of type 3 and 4 – with more visual prominence – directed potential patrons to a street-facing podium to be seated.



Figure 6. Partially Gated Entry on the Sidewalk on the Southern End of Site 1

The path drawings for northbound pedestrians at Site 1 (See Figure 7) show that many pedestrians approached the gate before detouring into the roadway and around the OCS corridor. Pedestrians were still allowed to enter the officially public OCS corridor, but the cordon and resulting bottleneck implied exclusivity, leading many pedestrians to abruptly divert their path. As shown in Table 5, this type of pedestrian behavior was absent in nearly all other observations, even northbound observations at Site 1 without the gate fully deployed. Only 11% of the groups who walked past or approached the Site 1 gate went through it (*into the OCS corridor*). That is about one quarter the proportion of pedestrian groups who entered OCS corridors across all observation sites on blocks closed to traffic (see Table 5). The finding is bolstered by feedback from many walking interviewees, many of whom commented that the gate gave the impression of the sidewalk being an extension of the restaurant's indoor space.

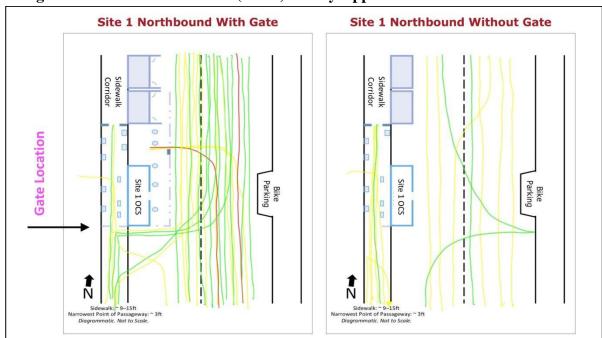


Figure 7. Pedestrian Behaviors (Paths) as they Approached the Site 1 Cordon Gate

Table 5. Proportion of Pedestrian Groups Entering OCS Corridors*

	Site 1 Northbound With Gate	Site 1 Northbound Without Gate	Closed Block Observations	All Observations
Observations Entering OCS Corridor	11.11%	28.57%	40.91%	54%

^{*}n(Site 1 Northbound With Gate) = 27; n(Site 1 Northbound Without Gate) = 14; n(Closed Block) = 484; n(All Observations) = 663

In this case, deployment of the roped barriers and signage appeared to be the most impacting design feature discouraging pedestrian activity through the OCS corridor, rather than the OCS itself. This is evident by the otherwise typical pedestrian behavior along the same OCS corridor without the cordon deployed, and comments from walking interviewees reflecting the same. As one respondent said, "I think it's fine as long as I'm still allowed to walk through, or if I can walk in the street," with several others noting that it was the gate, not the OCS, that influenced their perception of public access. The comment also reflects that the street closure simultaneously mitigated the negative impact of the gate, providing relief to the crowded sidewalks when the OCS corridor was congested. A few others actually expressed appreciation for the cordon, suggesting it improves the legibility of boundaries between public and private space and activity, while simultaneously limiting further expansion of restaurant patrons into the sidewalk.

In summary, the results show how opening the street to pedestrians during peak corridor activity helped OCS contribute to the public space while minimizing the negative impact to pedestrian mobility through the public sidewalk.

Finding #4: The Shared Spaces program amplifies the commercial character of Valencia Street unevenly across business types

An additional finding from the interviews and observational methods is how the commercial character of Valencia Street has been amplified in uneven ways with restaurants – and to a lesser extent, cafes – becoming more prominent on the street than other business types. The contributions of these establishments to the street's environment were more noticeable because of the OCS and street closures. These businesses' unique atmospheres, previously kept internal to their storefronts, may now unfurl into the streetscape. The contributions manifested in varying ways, with some businesses functionally privatizing portions of the sidewalk and street for their use and control, fencing off areas and/or barricading OCS during business off-hours. Others blurred the boundaries between public and private, encouraging sprawling socialization and a spectrum of uses at all times of day, and especially during street closures. But *non*-dining establishments such as those selling clothing or other merchandise did not yet utilize Shared Spaces opportunities to the same extent.

Different businesses also attract different demographics to the area. Upscale restaurants and bars/clubs arguably draw a more city-wide or even regional clientele. One interviewee described a common sentiment that "Valencia's food and drink options make it a destination spot"; but cafes, convenience stores, and more affordable shops may attract a more hyper-local customer base. If so, disproportionately high OCS adoption among upscale restaurants, for example, *might* amplify Valencia Street's appeal to non-local users, such as tourists and night life seekers. However, walking interviewees noted several examples of windfall benefits to other storefronts. One respondent living nearby Valencia Street for over a decade said that "working-class joints" had more opportunities to expand their business too, through "less formal, more open and communal" OCS installations.

Additionally, many respondents seemed to believe that even if the OCS inadvertently favored more upscale businesses, it would merely align with changes already occurring — or already *occurred*, according to some. To paraphrase a former resident of the Mission District and current owner of a Valencia Street business for more than ten years:

All the [Shared Spaces] changes will likely just exacerbate the existing directions that businesses were going: if they were gentrifying, privatizing, commercializing public space already, they'll only do it more after these changes, and if a business was community-centric and doing positive things with their space, they'll likely be able to do more of that with these changes.

This finding renders the Shared Spaces program a commercial tool that can result in both positive *and* negative outcomes for the area. Whether OCS alienate or ingratiate existing community members (and/or a geographically broader customer base) depends on the individual business and their mindset. "Shared Spaces" can be used for either end.

Finding #5: Equity remains a major concern for Shared Spaces

Equity is a complex but crucial element of urban development at large, and the Shared Spaces program is no exception. We arrived at three distinct-but-related levels for assessing the equity implications of OCS along Valencia Street: the human level, the business level, and the neighborhood level.

A) At the human level

The human level references the impacts of OCS and street closures on physical accessibility and inclusiveness on Valencia Street, which both observational and interview data underscored as a major concern. In short, different people experience public space differently, and the large-scale changes to the streetscape on Valencia Street *may* favor certain demographics and needs over others.

For OCS themselves, the city design guidelines explicitly required that Shared Spaces preserve at least six feet of open sidewalk space for public thoroughfare, and we observed multiple instances failing to meet this standard. But even when this condition was met, additional features of OCS can impede individuals in wheelchairs and those with other mobility impairments. Examples include protected extension cords from the building to the OCS (to power lights and heaters in many type 3 and 4 structures) and the expansion of social activity beyond the boundaries of the OCS, which we observed in OCS of all types. In this way, businesses that installed even minor physical barriers – such as the rope cordon described earlier – were praised by some of the walking interviewees for clearly delineating boundaries. **Rather than** *exclude* **the public**, **the additional barriers may** *contain* **the patrons**. Though street closures may mitigate this tension, it may simultaneously render handicap accessible parking and/or drop-off points unavailable, making it more difficult for differently-abled individuals to access businesses and services on blocks closed to vehicular traffic. The City's permanent legislation raises the throughway requirement by two feet (to eight feet), but the concern remains relevant.

Additionally, some interview respondents expressed concerns about Valencia Street's function changing from a thoroughfare for active mobility (walking and biking, with the bike lanes to support it) to an open arena for varied uses, including loitering. For example, one walking interviewee commented that "As a female, I don't love having more drunk people hanging around on the sidewalk." A few other female-identifying respondents mentioned concerns about being watched or approached by strangers (especially men) while using OCS, and preferred the privacy of more enclosed, type 3 and 4 OCS. This contrasts with several other interviewees (male and female) that reported feeling safer along the entire corridor thanks specifically to the large number of people (again invoking Jane Jacobs' "Eyes on the Street" sentiment). Many respondents raised additional concerns about the implications of OCS and unhoused residents: some worried about public health and sanitation if folks slept in type 3 and 4 OCS overnight, while others praised OCS for precisely that potential use. Though we did not talk to any unhoused residents for this research, we did observe several of Valencia Street's OCS serving as overnight shelter for some. The City's permanent legislation, however, with these concerns and vandalism in mind, allows businesses to close down public access to their OCS between midnight and 7am. It remains unclear how this might change the operating policies of existing OCS.

Lastly, it is worth mentioning that the police station at the intersection of Valencia and 17th Street has served as the endpoint for numerous public protests throughout the pandemic, many of which have been in response to the high profile (and continued) cases of police violence in the U.S. This has an unclear influence on the perception of Valencia Street as a whole; though street closures did allow for expanded public activism – for both celebration *and* protest – with less concerns for pedestrian safety from vehicular traffic, the symbolic presence of the police station (and, consequently, armed police) complicates Valencia Street's public perception.

Suffice to say that different people experience public space differently, and the many-layered changes happening simultaneously on Valencia Street – including the proliferation of OCS – may not be universally welcoming.

B) At the business level

In many of our interviews with residents, business owners, and other key stakeholders, we heard broad but clear concerns regarding which businesses are able to take advantage of these streetscape transformations and who they truly benefit. In concrete terms, more prominent, type 3 or 4 OCS, which offer the most visible opportunity to reshape the public streetscape, can cost tens of thousands of dollars to build and permit, making them inherently less feasible for smaller businesses with lower operating capital. Such establishments are often the city's most vulnerable: small, independent, and/or minority-owned businesses with existing, intersectional disadvantages and difficulty accessing available resources. For both the public parklet programming before the pandemic, and Shared Spaces during it, the City of San Francisco partnered with corporate sponsors to offer grants to help eligible businesses finance their parklets and OCS. However, more than one respondent with experience on the matter (that do not work for the City) reported that the program lacked transparency and that little to no funding was actually administered, ultimately deepening many business owners' distrust of city administration and the sincerity of the lifeline. This reinforced a common sentiment among the business owners interviewed: it is difficult to navigate the complicated bureaucratic processes and multi-agency guidelines for OCS and other permits from the City. This complexity can be especially challenging for non-English speakers and those without the time or resources to push through permitting procedures. The grant program extended into February 2022 to provide financial assistance to those bringing their OCS into compliance, but it is unclear how many businesses could and did take advantage of this opportunity. The City's permanent legislation also offers a 50 percent discount on Shared Spaces permit fees (which range from \$1k-\$3k for initial permits and up to \$2k for annual renewal) for businesses with less than \$2 million in gross receipts, though this tends to be a small proportion of the total cost to construct permanent OCS.

A more abstract consideration in the business-level equity conversation is the inherent preference of specific business types over others that may be embedded in Shared Spaces programming. The legislation was written and implemented with the express intent to allow *sit-down dining* establishments to maintain operations during the pandemic by installing OCS, and this is partially evident in that the majority of OCS on Valencia were installed by restaurants. A handful of non-dining business owners we interviewed claimed that the street closures and OCS of neighboring businesses led to a general increase in pedestrian activity, which they believed to benefit their

business as well. And both walking interviewees and some business owner respondents expressed optimism that non-dining retail *could* take advantage of permanent OCS in creative ways over time. But several other business owners and residents reported that type 3 and 4 OCS visually block other storefront's signage and obstruct the "window shopping" on which many non-dining businesses depend, though we should note that the City's permanent legislation requires minimum sightlines. A few business owners worried about stores that rely on vehicular access for deliveries and customer pickup, though they all expressed equal concerns with the status quo of street parking. Lastly, there are ongoing concerns around a wholesale decline of in-store retail due largely to a rise in e-commerce platforms and services (Berman, 2019; Helm et al., 2020). Amidst such concerns, OCS may exacerbate a disproportionate growth in dining establishments over other business types, with unclear implications for equity.

C) At the neighborhood level

Finally, the neighborhood scale of equity concerns about Shared Spaces refers to which communities and corridors are most able to take advantage of the opportunities to change the streetscape. Many interviewees across all stakeholder groups mentioned this in regards to the temporary street closures in particular. Multiple respondents described the considerable amount of knowledge and resources required to get approval and sustain operations even for *temporary* street closures through Shared Spaces. Valencia Street was among only a handful of corridors in San Francisco with regular street closures to support *commercial* activity, and it received approval from the City largely due to the organizing power and administrative support of the Valencia Street Merchants' Association.

Peripherally, an interviewee familiar with the similar street closure permits issued for Grant Street in Chinatown described great difficulty in financially sustaining the operation. Mission Street, on the other hand – one block east of Valencia Street and similarly dense with commercial activity from 14th to 24th Street – has not been able to permit similar partial, temporary street closures similar to those on Valencia Street. Mission Street has a priority bus lane (the still-controversial "Red Carpet", installed in 2016 with complicated constellations of support and opposition) whose service would be disrupted by any closures to Mission Street.

Concerns around which businesses are able to take most advantage of permanent Shared Spaces legislation also have neighborhood-scale implications. Certain districts – including the Mission – prominently feature in their high concentration of restaurants and other dining establishments. If these business types serve to benefit more from permanent OCS utilization than other retail (such as live music venues, clothing stores, auto shops, and others), Shared Spaces programming may influence community-scale economic development dynamics in complicated and unintuitive ways.

These are difficult questions with no obvious answers, but they magnify the passive and active role that the City of San Francisco plays in the proliferation of OCS, particularly as only certain corridors and businesses prove able to take advantage of the opportunity for expansion.

Limitations

This research has many limitations. The first and most obvious is that the pandemic may have substantially altered the "typical" preferences of people in public space. This includes psychosocial factors, as our desire and/or capacity for human-to-human interaction may have heightened or lowered. The work-from-home mandate and the limited ability/willingness to travel outside the region may have also increased or decreased the number of people using public space recreationally. And for nearly the full duration of this project, outdoor space was the only space available for many of the businesses with OCS in our study area. Thus, the use and usefulness of OCS may change drastically as businesses reopen their full, unmasked indoor service capacity.

Additionally, though Valencia Street was a useful case study for this project due to its high density of OCS, the findings may not be generalizable across other commercial corridors even within the same neighborhood, let alone in other parts of the city (or other cities altogether). While we expect that certain aspects of our findings – such as the importance of equity considerations, for example – likely remain relevant in other study areas, individual comments and behaviors are more likely to vary across different geographies within and beyond San Francisco.

Lastly, even within our project's limited scope, many questions remain. Our interview sample is likely biased in ways both predictable and not, and limited time and resources prohibited the use of potentially helpful data such as more detailed analysis of individual commercial spaces, such as length and type of tenure.

Conclusion and Implications for Practice

Given the unprecedented scale and speed of the changes brought about by the Shared Spaces program across all of San Francisco, their recent permanent legislation, as well as the disproportionate impacts that the pandemic has had on residents and business owners of color, an equity-first lens is paramount. Our research implies that OCS and the street closures of Shared Spaces do not seem to create new problems on Valencia Street, but instead underscore existing issues. Broadly, these include who has the right to shape the public streetscape and how, the physical accessibility of sidewalks and streets, and the lack of regular and transparent communication between the City of San Francisco and its many business owners (and residents) about changes to the streetscape.

The complementary nature and use of the street closures along Valencia Street and its OCS will likely continue to yield important lessons as their mutual implementation sets new norms for commercial corridor programming. There are of course important considerations in this, including the diverse transit modes for different businesses' customer base and the potential impact of diverted traffic flow on residents and adjacent blocks. But our findings highlighting the value of the temporary street closures, as well as the long-term goals the city has for promoting active mobility, may merit expanded access to street closures on Valencia Street and elsewhere.

While the city continues to collect feedback on the permanent Shared Spaces legislation, the diversity in the preferences even in our modest sample size implies that generic and rigid mechanisms for public engagement may not capture potentially important variations in

perspectives. Interveys, though useful for assessing concise opinions, may miss important details in the conditional preferences of different constituents and stakeholders. In the short and long term, this suggests that businesses and the City should continue to collect open and qualitative feedback on OCS design and implementation. A promising sign is that the City already has an ongoing survey for Shared Spaces program feedback with some open-ended questions.² But this survey is only for small business owners, and it is unclear how long this communication channel will be available or whether or not there are accountability mechanisms for analyzing and incorporating feedback. Other potential mechanisms for this could be city-designed and mandated signage on OCS that includes a QR code for collecting open-ended feedback.

For all the terms in the permanent legislation, however, perhaps the most critical and pressing questions surround the program's governance in general – balancing the purview of multiple agencies and priorities – and enforcement in particular. Both of these may amplify or overshadow many of the concerns raised thus far, offering ample avenues for future study.

In spite of the circumstances, outdoor commercial spaces and temporary street closures have already appeared to create more people-centered, active streetscapes in San Francisco. There are important concerns around equity and the potentially exclusionary consequences of changes made under the banner of Shared Spaces programming. But we must also acknowledge many of the same concerns embedded in the status quo of car-centric planning that prioritizes on-street parking over pedestrian and social space. If the continued transition towards permanent OCS is done thoughtfully and intentionally, they can be a tool and catalyst for engaging streetscapes on Valencia Street and beyond.

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² Link to feedback form for small business owners: https://sf.gov/information/give-feedback-impact-shared-spaces

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Appendix

A1: Mission District Background/Context

Figure A1. Census Tract Boundaries Bordering Valencia Street (Shown as the Red Line)

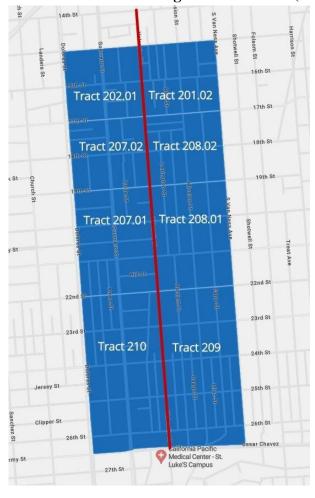


Table A1. Selected Census Tract Characteristics Across Valencia Street*

Census tracts West of Valencia (North to South)	Median income	(Table A14006)	Census tracts East of Valencia (North to South)
202.01	\$112,610	\$114,375	201.02
207.02	\$131,987	\$122,463	208.02
207.01	\$219,375	\$96,979	208.01
210	\$142,417	\$130,500	209
Average	\$151,597	\$116,079	Average
Average differential	\$35.	·	
8	% with Bachelor's		
202.01	40.25%	26.55%	201.02
207.02	45.19%	45.99%	208.02
207.01	46.44%	39.72%	208.01
210	39.90%	38.16%	209
Average	42.95%	37.61%	Average
Average differential	5.34	5.34%	
	% Hispanic (T	Cable A04001)	
202.01	29.09%	20.24%	201.02
207.02	33.25%	24.30%	208.02
207.01	14.80%	44.90%	208.01
210	12.55%	40.59%	209
Average	22.42%	32.51%	Average
Average differential	-10.0	-10.09%	
	% Renters (T		
202.01	84.28%	87.47%	201.02
207.02	83.66%	78.55%	208.02
207.01	61.32%	92.18%	208.01
210	67.01%	83.12%	209
Average	74.07%	85.33%	Average
Average differential	-11.2	26%	c 2020

*All data is from US Census Bureau ACS 5-year estimates for 2020

A2: Walking Interview Guide

We conducted our walking interviews of San Francisco residents beginning at or near the intersection of 16th Street and Valencia Street, walking south. The following questions served as signposts to loosely guide the conversation, and as such were intended to offer open-ended thoughts and insight from respondents. The bolded questions were those asked during both walking interviews and the briefer "interveys" of patrons and pedestrians.

- 1. What are your thoughts on the outdoor commercial spaces that have propped up since the beginning of the pandemic?
- 2. Have you used them in general, and specifically any of the ones on Valencia Street?
- 3. Do you prefer spaces with full walls and a roof, or when there are just chairs and tables out in the sidewalk and street?
- 4. When the streets are closed to vehicles, do you prefer to stay on the sidewalk or walk in the street?
- 5. If the business was closed, would you feel comfortable using the space?
- 6. [While standing next to or walking past unique spaces, whether by its design or its size] What are your thoughts on *this* space in particular?
- 7. Which have been your favorite outdoor commercial spaces along Valencia Street?
- 8. Is there anything you would like to see change about OCS if they become permanent?