

# A Walk in San Francisco

## A Pedestrian Study of 9th and Irving and Upper Market/Castro



For the Planning Department of the  
City and County of San Francisco

Melinda Alice Stockmann  
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I would like to thank all of the friendly, cooperative people I met on the streets of San Francisco for contributing a wealth of information to this study.

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# INTRODUCTION

Streets are most often seen serving the role of a travel corridor. Streets act as access ways permitting people to access goods and services, whether out of necessity or for pleasure. For residents and merchants along its length, streets are the first and most easily accessible public spaces. They can be like plazas and parks, serving both as spaces for individual activities such as rest, repose, and people watching, or as spaces of gathering, socializing, interaction and recreation. Ultimately, streets can be spaces which offer a sense of place, security, and identity for its users within the urban environment. The fact that streets can take on all these functions does not imply that streets will automatically do so.

Urban planning plays a major role in improving the quality and character of the urban environment. Urban planning works to affect change through physical interventions. It has little direct control over the types of human activities or social interactions that can or cannot occur in a public space. However, since the physical condition of public spaces is one of the factors that influences the types of activities

that can occur within them, planning has a role to play in setting the social dimensions and qualities of the urban environment.

There are two goals for this study. The first is to establish a data set for future comparisons of pedestrian activity along streets under study to see whether physical changes through the form of streetscape improvements have the effect of encouraging greater and more diverse street activities. Secondly, this study aims to understand the current perceptions and opinions of street users on these two particular streets to evaluate their success as urban public spaces.

The two areas under study are in neighborhood commercial districts. They mix commercial, institutional, and residential land uses that require streets to serve many of the necessary and optional needs of residents, merchants, and street users outlined in the preceding paragraphs. The diversity of land uses, as well as the physical design of streets in these districts have the potential to encourage a broad spectrum of human activities that make public spaces attractive, interesting, and inviting.

This study follows and builds on a similar report done by the San Francisco Planning Department in summer 2007. The 2007 study focused on Valencia Street and Leland Avenue. A consistent methodology will allow for comparisons of findings across reports.



## STUDY AREAS

The two areas under study are the intersection of 9th Avenue and Irving Street in the Inner Sunset neighborhood, and the intersection of Market and Castro Streets in the Upper Market/Castro neighborhood of San Francisco.

These sites were selected because they are neighborhood commercial districts with streetscape improvement plans in place. These two areas serve as points of comparison to assess how future changes to their streetscapes influence the character, use and perception of these streets.

Preliminary observation led to selection of multiple sample sites within each study area. Three sample sites were chosen for the 9th and Irving study area, because it seemed like there was a possibility that each of the blocks could have distinct pedestrian behavior. The sample sites are Irving Street, between 7th and 8th Avenues; 9th Avenue between Lincoln Way and Irving Street; and 9th Avenue, between Irving Street and Judah Street.

In the Upper Market/Castro study area, it

seemed that Market Street and Castro Street had distinct pedestrian behavior, so one sample site on each of these streets was chosen. They are Market Street, between 16th Street and Castro Street; and Castro Street, between Market Street and 18th Street.

INSERT SF MAP WITH STUDY AREAS HIGHLIGHTED HERE

Fig 1. Study Areas



# METHODOLOGY

Pedestrian counts, stationary activity counts and observations were used together with a pedestrian survey to achieve this project's goals.

## *Pedestrian counts*

Pedestrian counts were conducted in June and July when the weather was generally nice. Counts were taken at each of the five sample sites, all of which were at or near midblock sections. Data collected between 8 am and 10 pm on Tuesdays through Thursdays were collapsed into a weekday category, while data collected between 10 am and 10 pm on multiple Saturdays were collapsed into a Saturday category. Counts were started earlier on weekdays than Saturdays to capture rush hour data and were done at both study areas until 10 pm to capture and compare pedestrian night life. Ten-minute counts were taken sometime within each hour and then multiplied by six to represent the pedestrian flow for each hour.

## *Stationary counts*

Once during each hour of the sampled day, stationary activity at each of the five sample sites was also recorded. This was done by rapidly circling the block and recording observed stationary activities. Typically, this walkthrough required no more than five minutes, and represents a snapshot of stationary activities during the sampled hour.

## *Observations*

During the time spent on the street, qualitative observations were made of pedestrian activity. Specifically, this involved watching people's behavior and recording activities that demonstrated symptoms of sidewalk crowding, adaptive reuse of street objects, or a deficiency in physical design of the pedestrian realm in accommodating pedestrian needs.

## *Pedestrian Surveys*

To obtain information regarding the purpose of people's visit and their perception and satisfaction with the street's design, 100 surveys were conducted at 9th and Irving as well as in the Upper Market/Castro study area. Surveys were carried out from Monday through

Saturday, with the majority being done on weekdays. Equal numbers of respondents were acquired from each of the sample sites within the two study areas, so that responses could be analyzed based not only on study area but also on specific blocks.

Randomness in the survey sampling was attempted by asking every person who walked by to respond to the survey until a willing respondent stopped. (Groups who were actively socializing were not approached.) All but a few surveys were administered verbally, and responses were recorded by the surveyor. Each survey took anywhere between three and thirty minutes, with the average being eight minutes, after which attempts to solicit responses from every passer-by were resumed. With regards to questions of satisfaction, respondents were given a 7-point scale on which to respond, where 1 represented unsatisfied, 7 represented satisfied, and 4 represented neither unsatisfied nor satisfied. In other words, values of 1 to 3 represented some level of dissatisfaction while values from 5 to 7 represented some level of satisfaction



regarding the subject. Survey responses were analyzed using a statistical package and are summarized below.

*Sample representation (Pedestrian Surveys)*

Fig. 3 shows the hour at which surveys were collected for each study area. At 9th and Irving, the greatest number of surveys were collected in the afternoon (between 1-4 pm), while in the Castro more were collected in the late afternoon/ evening (4-7 pm). The data can be said to represent afternoon street users of each street well. The pedestrians who commute by foot in the morning during normal working hours and people who come to the street for evening and nighttime

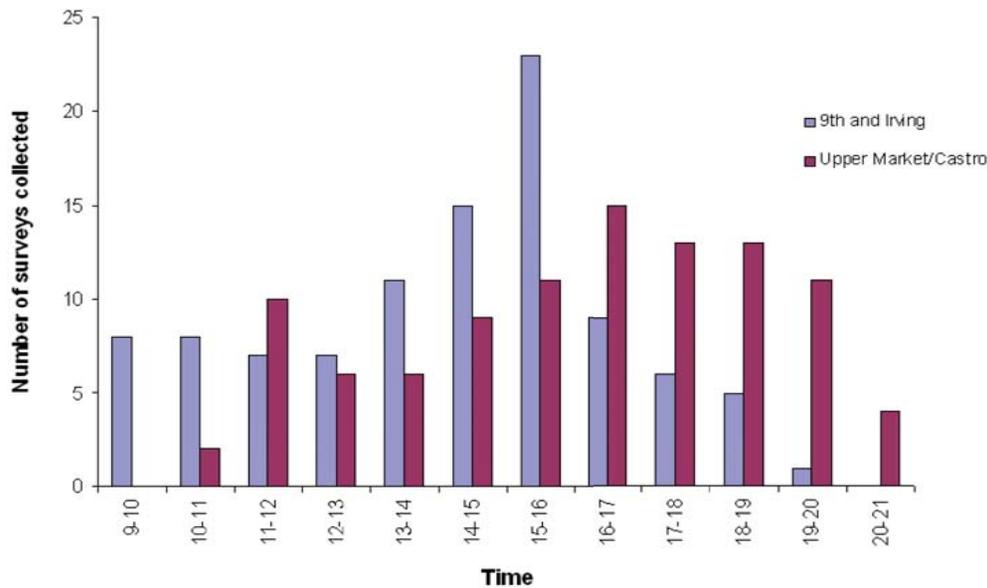


Fig 2. Hour of Survey Collection

activities would not be well represented by the sample.

The gender of respondents was more equally balanced at 9th and Irving (61% male, 39% female) than it was in the Castro (81% male, 19% female).

The age profiles of respondents from the two streets are shown in fig. #. In both study sites, people between 20 and 59 years old comprised over 80% of respondents, people over 60 comprised over 10% of respondents and people under 20 made up less than 5% of respondents.

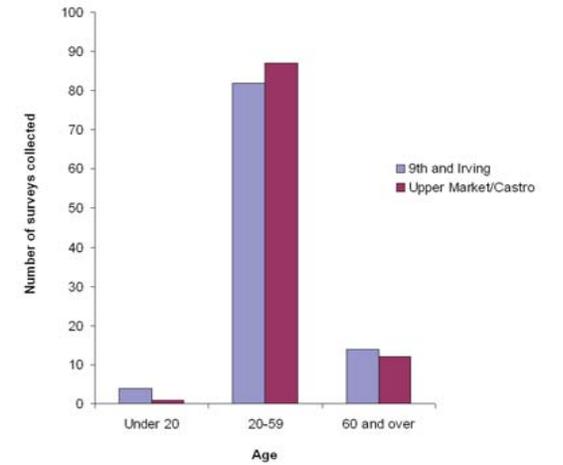


Fig 3. Age of Survey Respondents

Figures 4 and 5 show the geographic distribution of survey respondent residences. At 9th and Irving, 27 respondents live within a quarter mile of the study area, as compared with 15 in the Castro. Approximately half of the respondents live within one mile of the respective study areas. Eighty-six respondents at 9th and Irving were residents of the city of San Francisco, as compared with 75 in the Castro. A small number (less than five) of respondent addresses were excluded from the analysis of each study site because they could not be interpreted with available GIS data.



Since the survey was conducted in English, non-English speakers were excluded from the sample. However, only one or two survey solicitations failed in each study area due to lack of English fluency on the potential respondents' part. People visiting San Francisco from other parts of the country and from other parts of the world sometimes self-selected out of the study because they assumed their opinions were not wanted. It is not known to what

degree ethnic populations are adequately represented in the sample and future work should look to collect race or ethnicity in order to make comparisons with census data and further establish sample representation.

Survey response rate was just over 20% in both study sites.



Fig. 4. Residence Map for 9th and Irving Respondents

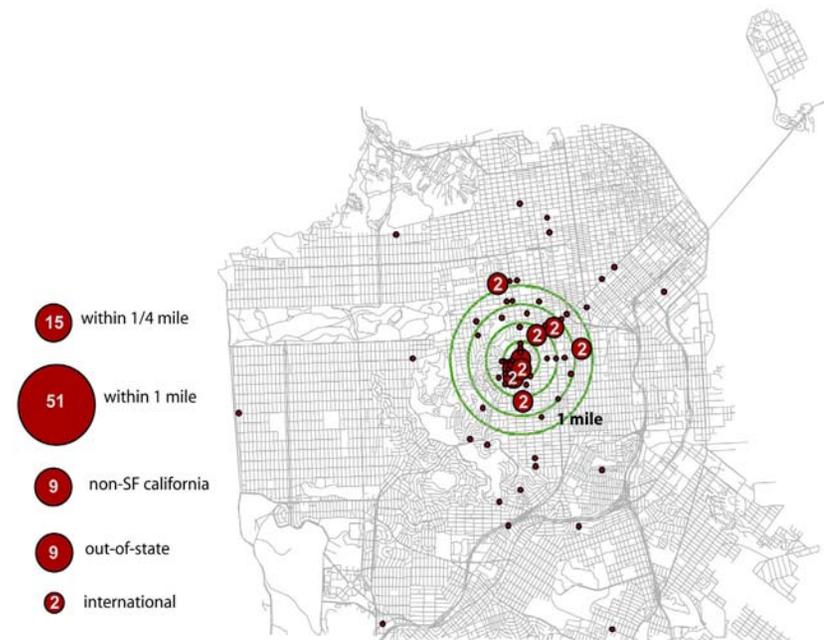


Fig. 5. Residence Map for Upper Market/Castro Respondents

# RESULTS

## Pedestrian Traffic

### 9th and Irving

Pedestrian Traffic at 9th and Irving was nearly equal for weekdays and Saturdays during the consistently counted 10 am-11 pm hours. The block of 9th Avenue between Irving and Lincoln had the largest split

between total weekday and Saturday (42.5% vs. 57.5%) traffic.

The pattern of pedestrian traffic was relatively similar at the three sample sites in the 9th and Irving study area, with peak volumes occurring at lunch and dinner time (Figs. 6 and 7). This makes sense given the high density of restaurants and cafes in the neighborhood and the fact that 75% of survey respondents cited dining as the reason for their visit. Weekday and

Saturday counts were taken on various days and compiled to get a picture of daily activity. Data for Saturday from 10 am- 5 pm was collected on a different day than for Saturday from 5-11 pm. There was a substantial difference in weather, which is not uncommon for this neighborhood, on these two days. The first day was clear-skied, sunny and very warm, while the second was foggy, windy and cold.

The block of 9th Avenue between Irving

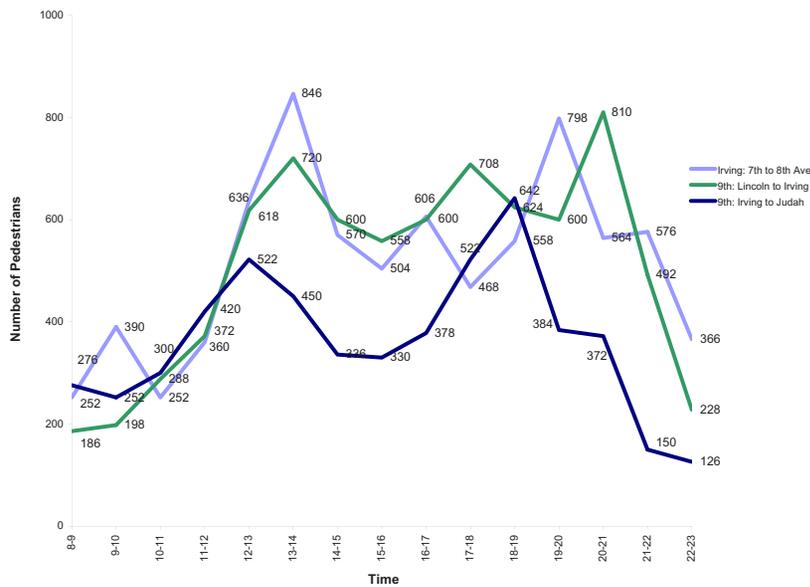


Fig. 6. Weekday Pedestrian Traffic, 9th and Irving

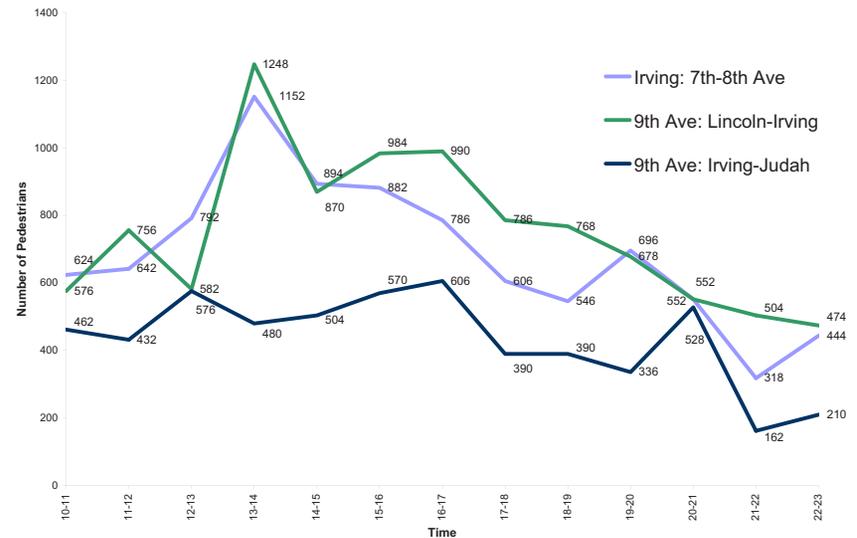


Fig. 7. Saturday Pedestrian Traffic, 9th and Irving



Street and Judah Street generally had the lowest number of pedestrians. The higher weekday morning volume on this block may be due in part to two popular coffee or breakfast spots, The Beanery and Arizmendi. The block of 9th Avenue between Lincoln Way and Irving Street had peak weekday volumes at lunch and dinner time and peak Saturday volumes at lunch time, as well as mid-afternoon. This block connects 9th and Irving to Golden Gate Park, so people walking between these two destinations are most likely a substantial component

of pedestrian traffic. A lack of dinnertime peak in Saturday pedestrian volume may be due in part to the weather. There were more pedestrians on Irving Street, between 7th and 8th Avenue, during the afternoon and evening hours of the weekdays than during the morning hours. This is not true, however, for Saturdays. Again, the weather may be partially responsible for the lower Saturday afternoon and evening pedestrian traffic.

Pedestrian traffic at all three sample sites

dropped after a dinnertime hour peak on the weekdays. However, the number of people on Irving Street and on 9th Avenue between Lincoln and Irving between 10 and 11 pm on weekdays was about the same or greater than the morning numbers. On Saturdays, pedestrian traffic also dropped after dinnertime. Increases in number after 8pm on Irving Street and on 9th Avenue between Irving and Judah may be attributed to weekend nightlife. There is a bar on either of those streets, and one café, Tart to Tart, is open late. However, in comparison to the Upper Market/Castro study area, late



Fig. 8. Weekday Pedestrian Traffic, Upper Market/Castro

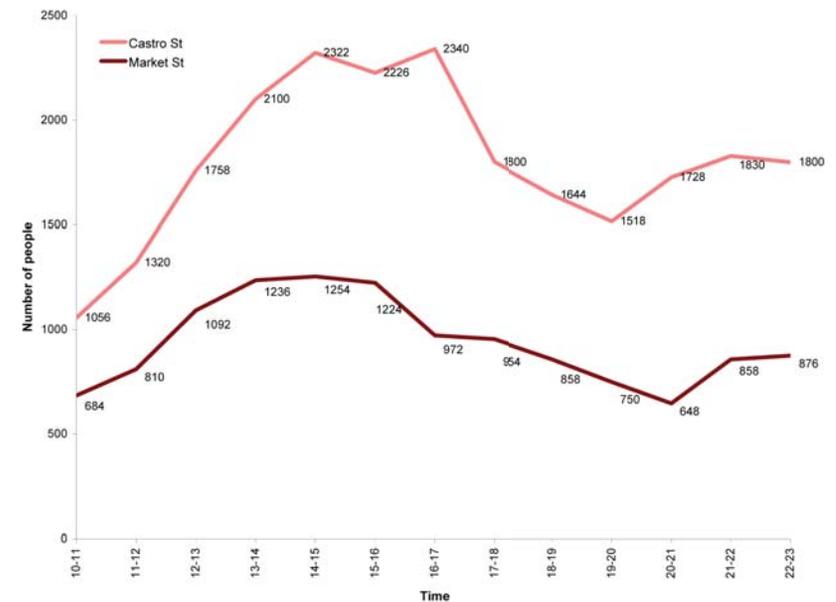


Fig. 9. Saturday Pedestrian Traffic, Upper Market/Castro



night activity comprises a small portion of pedestrian traffic at 9th and Irving.

### Upper Market/Castro

Pedestrian Traffic at Upper Market/Castro was nearly equal for weekdays and Saturdays during the consistently counted 10 am-11 pm hours. Both Castro Street and Market Street had a 42.5% vs. 57.5% split for total weekday and Saturday traffic.

The pattern of pedestrian traffic was relatively similar at the two sample sites in the Upper Market/Castro, but there were consistently twice as many people on Castro Street as on Market Street (Figs. 8 and 9). On weekdays, the number of pedestrians peaked from 8-9 pm on Market St. and from 6-7 pm on Castro St. Traffic rose through the afternoon on both blocks, but whereas Market Street had the greatest traffic during the dinnertime hours and then fell, Castro Street traffic fell during the dinnertime hours (after 7 pm) and then rose again between 9 and 11 pm.

On Saturdays, pedestrian traffic on both Castro Street and Market Street dropped during dinnertime and then rose again late night. This difference between weekday

and Saturday pattern could be due to the fact that the two nightclubs on Market Street are much busier on Saturday nights than weekdays as compared with the two bars on Castro Street that are open and busy on weekdays as well as Saturdays.

During one Saturday count (10 am-5 pm), several merchants on Castro Street were participating in a sidewalk sale and had merchandise on display outside their shops. There was also a film festival at the Castro Theater on the same day. These special events could account for high numbers of pedestrians on Castro Street, versus Market Street, between 1 and 5 pm on Saturday. However, because of the nature of the neighborhood, special events happen with some regularity, which suggests that the data may not be too far from typical

Fig. 10 shows the total pedestrian counts at all five sample sites, as well as at the two Valencia Street sample sites from the summer 2007 study. The middle column was included to facilitate comparisons because weekday counts for the 2007 study were started at 10 am, rather than at 8 am. The volume of pedestrians observed at 9th and Irving sites is comparable to that

observed on either block of Valencia Street. There is much greater pedestrian activity on Market Street and especially on Castro Street than at 9th and Irving or on Valencia.

It has been suggested that if the number of people walking on a sidewalk exceeds 13 people per minute per linear meter (4 people per minute per linear foot), crowding is experienced.<sup>1</sup> Crowding is defined as when the number of people walking on the sidewalk exceeds the capacity for which it was designed. Castro Street was the only sample site in either study area that exceeded the threshold for crowding. Castro Street exceeded the threshold for crowding between 2 and 5 pm on Saturday.

	Weekday	Weekday, excluding 8-10 am	Saturday
<b>Irving Street</b>	7,746	7,104	8,934
<b>9th Ave, Irving to Judah</b>	5,460	4,932	5,646
<b>9th Ave, Lincoln to Irving</b>	7,602	7,218	9,768
<b>Castro Street</b>	18,564	17,382	23,442
<b>Market Street</b>	9,576	9,060	12,216
<b>Valencia, 16th to 17th</b>		7,664	5,962
<b>Valencia, 18th to 19th</b>		6,104	7,652

Fig. 10. Pedestrian Traffic Totals



### Stationary Activity

The type and frequency of stationary activity can be a strong indicator of how attractive and successful a street is as a public space. Fig. 11 on the right clearly shows that Castro Street was the most popular space to stop and spend time on the street. It also shows that standing was the most popular stationary activity at every site except Irving Street, on which the same number of people sat outdoors at cafes as stood. The prevalence of standing is of no surprise as there are few benches for seating in either study area. The lack of bench seating was also observed through people's behaviors; people were observed sitting on ledges below windows, against walls or on the sidewalk.

As the principal stationary activity observed, some comment must be made about standing. Many standing activities result from physical constraints. For example, one has to smoke outdoors because doing so indoors is prohibited. People may talk on cell phones outdoors due to a noisy indoor environment or out of politeness to others. Standing in line for restaurants or waiting for the bus do not reflect a choice to spend

time on the sidewalk either. While these activities are no less important as activities a street can accommodate, they comprise a lower tier of stationary activities and are less indicative of the success of a street. On the other hand, standing activities such as socializing demonstrate a choice to remain in the street and serve as better indicators of the quality of the physical street design.

The standing category was therefore broken down into three subcategories: waiting (for transit, as well as for seating at a café or for

another person); other necessary activities such as talking on the phone, using an ATM or smoking; and socializing, the one category that reflects a choice to spend time on the sidewalk given other options. At 9th and Irving, an average of 67% of people standing were waiting, 10% were engaged in other necessary activities, and 22% were socializing. The split in categories was similar across sample sites and for weekdays as well as Saturdays. In the Upper Market/Castro, an average of 54% of people standing were waiting, 17% were engaged

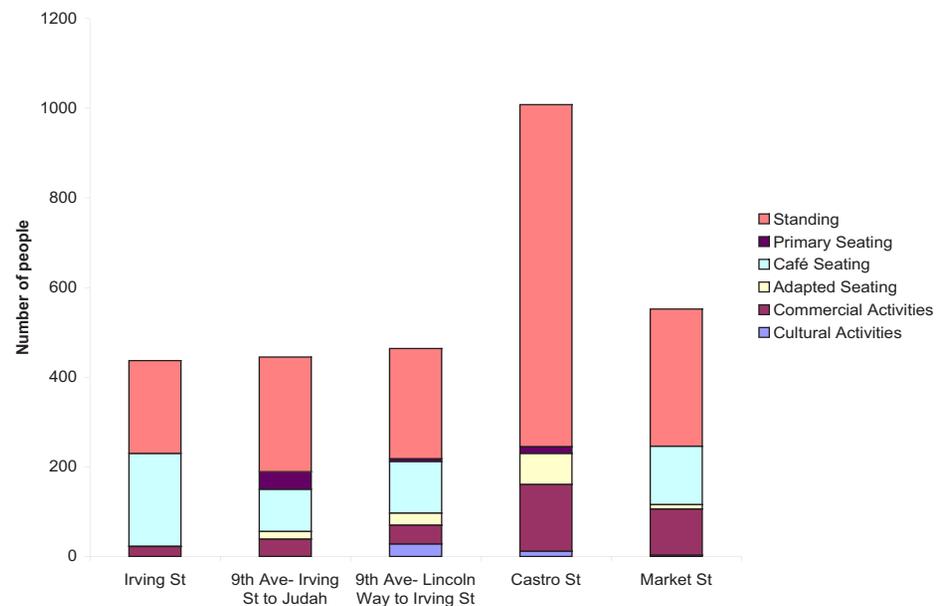


Fig. 11. Summary of Stationary Activities



in other necessary activities, and 30% were socializing. The split in categories was similar for both Castro and Market Streets and for weekdays as well as Saturdays. The percentage of pedestrians waiting was slightly higher on Castro Street, which can be attributed to long lines of people waiting for movies at the theater.

### Irving Street, 7th to 8th Avenue

The total amount of stationary activity on Irving Street was nearly equal on weekdays and Saturdays.

Irving Street is different than the other sample sites in that on Saturdays, there were more people sitting outdoors at cafes than standing. Only one person was observed in makeshift or adapted seating and there was no primary seating (sitting on public benches). This can be explained by the fact that there is a lot of café seating and no benches on this block. Commercial activities, either loading and unloading or browsing, comprised 6% of weekday and 4% of Saturday stationary activity.

A large number of people standing on this block on weekdays between 3 and 4 are

school children, waiting at the MUNI stop at the corner of 7th Ave and Irving. One of the shop owners on this block complained that the crowds of students at this time of day pose a challenge for his business. While Fig. 12 does show a greater amount of café seating in the afternoon, it shows that there are people sitting outdoors at cafes in the morning hours as well. This finding supplements the pedestrian counts in reflecting pedestrian life on the streets in that the counts may not have captured these people as they were sitting for the 10-minute count interval and therefore were not counted as passersby.

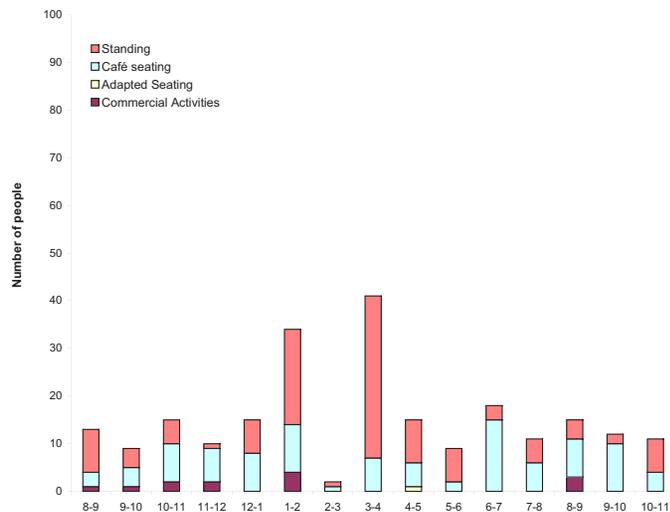


Fig. 12. Weekday Stationary Activity, Irving Street

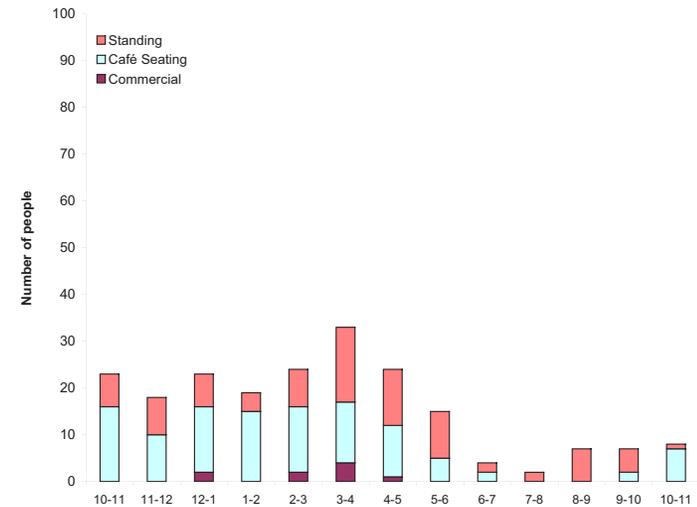


Fig. 13. Saturday Stationary Activity, Irving Street



## 9th Ave, Irving to Judah

The block of 9th Avenue between Irving and Judah Streets had more stationary activity during the week than on Saturdays.

Primary seating, or bench seating, was the third most popular category, after standing and café seating. It comprised 8% of weekday stationary activity and 7% of Saturday stationary activity. This makes sense because three establishments (Café Gratitude, Milano Pizzeria, and Mucky Duck) maintain benches for public

use outside their storefronts. However, adapted seating was also observed both on the weekdays and Saturdays. This can be attributed to people waiting for MUNI and sitting on the curb by the municipal parking lot.

Commercial activity comprised 7% and 11% of the total on weekdays and Saturdays, respectively. The block of 9th Ave between Irving and Judah is the only sample site at which a person was observed lying down, at 10 am on Saturday.

Figs. 14 and 15 show that the majority of outdoor café dining on this block occurs in the morning.

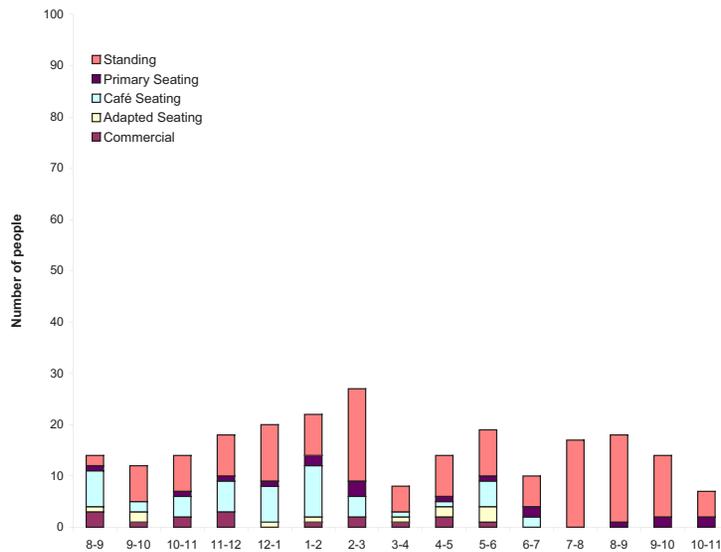


Fig. 14. Weekday Stationary Activity, 9th Ave, Irving to Judah

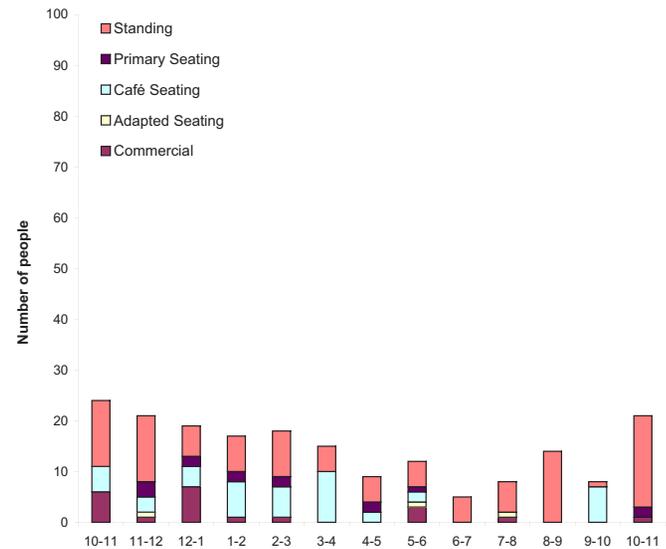


Fig. 15. Saturday Stationary Activity, 9th Ave, Irving to Judah



## 9th Ave, Lincoln to Irving

There was more stationary pedestrian activity on this block on Saturday than during the week.

Café seating was the second most popular stationary activity on the block of 9th Avenue between Lincoln and Irving. Only outdoor seating in the public right of way was included in this study. Of the five restaurants with outdoor dining on this block, three provide for this amenity within their lots. Because this study focuses on the public realm, they were excluded. Outdoor

dining is more popular in the afternoon and evening during the week (Fig. 16), but more popular in the morning and afternoon on Saturdays (Fig.17). This may be due to the popularity of Saturday breakfast/brunch at Park Chow. The Saturday evening outdoor dining may have also been higher if the weather weren't so poor (see Pedestrian Traffic section).

Cultural activities on this block included a band performance on Saturday afternoon, which attracted many spectators. Commercial endeavors comprised 10% of weekday stationary activity and 8% of

Saturday activity. This block of 9th Avenue has two industrial operations, a car mechanic and a roofing business. A few shops also attract browsing shoppers.

Adapted seating was observed during the week as well as on Saturdays on 9th Ave, between Lincoln and Irving. This was mostly Greenpeace canvassers, sitting on the stairs of the vacant building that was formerly a funeral parlor.

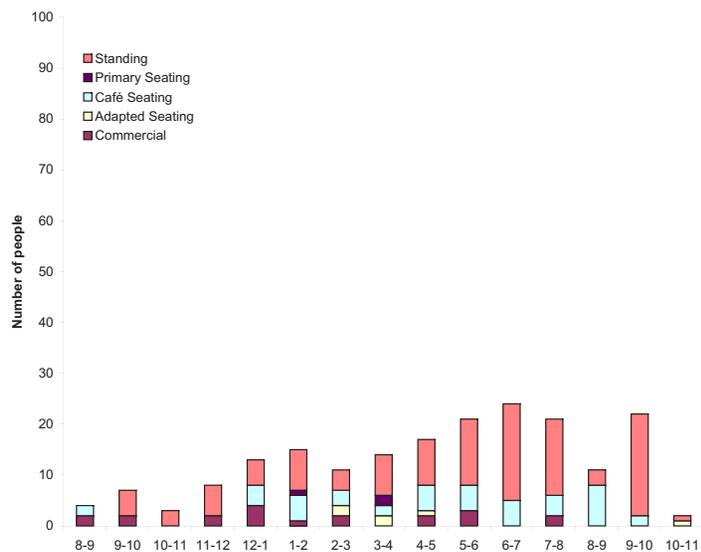


Fig. 16. Weekday Stationary Activity, 9th Ave, Lincoln to Irving

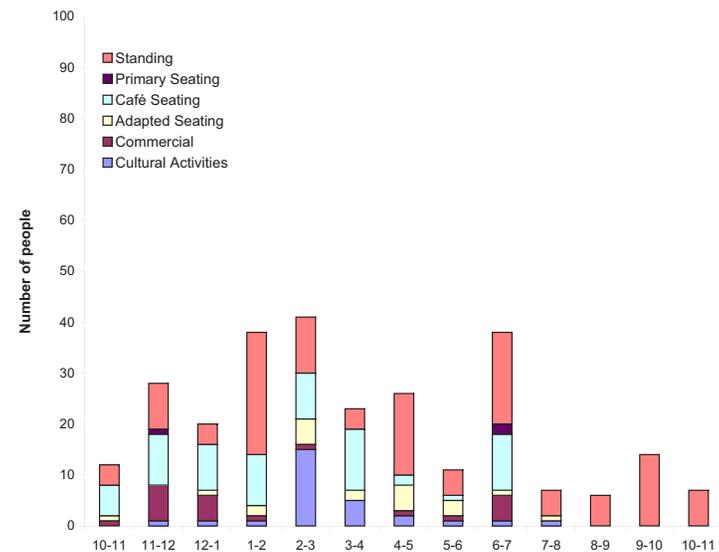


Fig. 17. Saturday Stationary Activity, 9th Ave, Lincoln to Irving



## Castro Street, Market to 18th

There was substantially more stationary pedestrian activity on Castro Street on Saturday than during the week.

The greatest amount of stationary activity of any of the five sample sites was observed on Castro Street. The largest margin in stationary activity between weekdays and Saturday was also observed on Castro Street. Saturday activity was greater at least in part due to the sidewalk sales and film festival. The sidewalk sales account for the majority

of Saturday commercial activity.

There were more people engaged in adapted or makeshift seating on Castro Street than at any other sample site. This could be due to the fact that there is no café seating and only one “bench,” which is a ledge built into the building just next to the Harvey Milk Plaza. The prevalence of adapted seating is partially attributable to the fact that more vagrant folks were observed on this block than anywhere else. Street people were observed sitting with blankets and gear in the Harvey Milk Plaza, just adjacent to

Diesel Jeans, as well as adjacent to the kiosk in front of the Walgreen’s at the corner of 18th Street.

Weekday cultural activities included musicians playing and an artist showing her work at night on the sidewalk. However, cultural activities comprised less than 1% of total stationary activity. Finally, late night commercial activity during the week as well as on Saturdays was comprised mainly of people paying cover fees to bars.

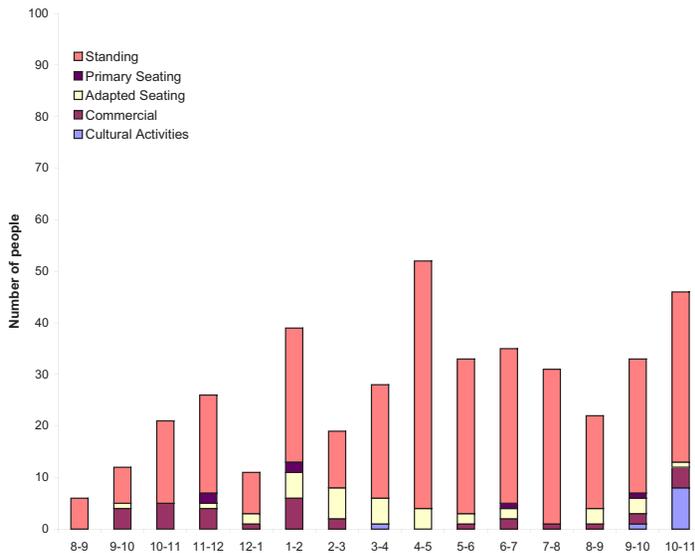


Fig. 18. Weekday Stationary Activity, Castro Street

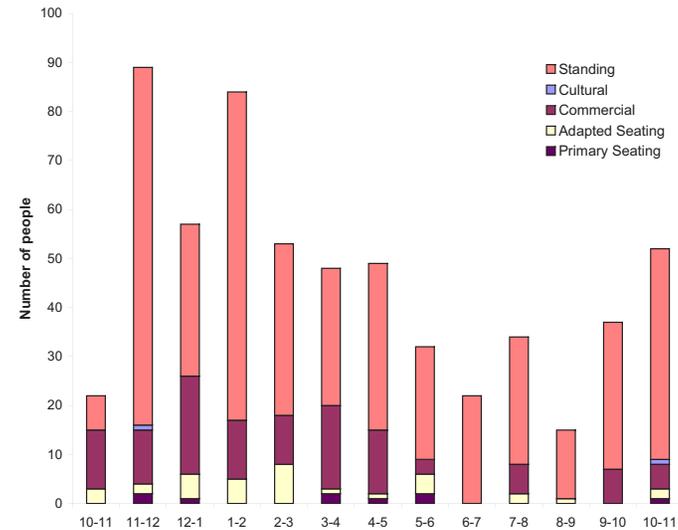


Fig. 19. Saturday Stationary Activity, Castro Street



## Market Street, 16th to Castro

There was substantially more stationary pedestrian activity on Market Street on Saturday than during the week. The largest differential in total weekday compared with Saturday activity in terms of numbers was observed on Castro Street. However, the largest differential in terms of percentage was observed on Market Street.

In contrast to Castro Street, 22% of weekday and 26% of Saturday stationary activity on Market Street was outdoor café dining. Outdoor dining was popular around dinnertime on weekdays, while it was more popular around lunchtime on Saturdays (Figs. 20 and 21).

There are no benches on this block of Market Street. Adapted seating was observed, but comprised a smaller percentage of total stationary activity than it did on Castro Street (less than 1% on Saturdays, as compared with 6% on Castro Street).

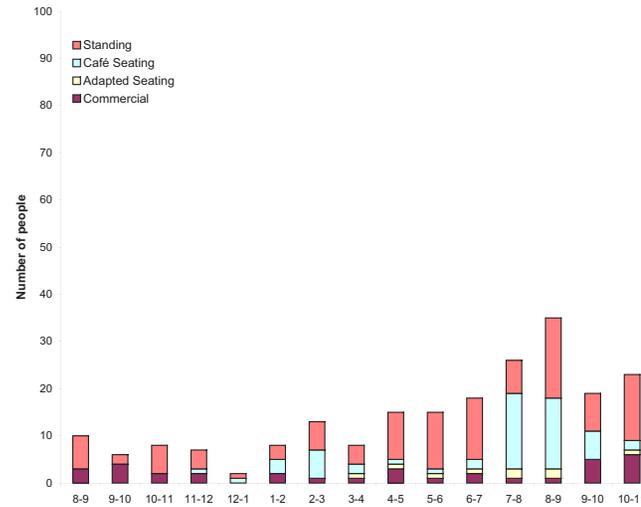


Fig. 20. Weekday Stationary Activity, Market Street

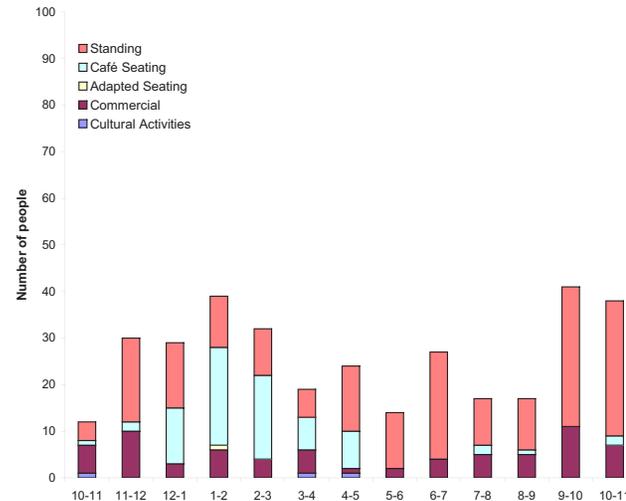


Fig. 21. Saturday Stationary Activity, Market Street





Fig. 22. Stationary Activity Montage



## Cycling

Bicyclists were counted with each 10-minute pedestrian count. However, it happened numerous times that low numbers or no bikes passed during that short interval, making it difficult to graph and confidently assess specific cycling trends in the two study areas. General trends, however, did surface and are noted below.

### 9th and Irving

More cyclists were observed at all three 9th and Irving sample sites on weekdays than on Saturdays. Of the three blocks, 9th Avenue between Lincoln and Irving had the largest volume. This may be due to the fact that people are biking in between 9th and Irving and Golden Gate Park. There was no clear increase in cyclist volume during regular 9-5 commuting hours.

### Upper Market/Castro

Many more cyclists were observed on Market Street than on Castro Street. On weekdays, the volume on Market Street was almost double that on Castro Street, while on Saturdays it was more than three times

greater. This substantial difference could be due to the fact that Market Street is one of the primary street corridors in the city and connects the Upper Market/Castro with downtown San Francisco. It could also be due to the fact that Market Street has marked bike lanes, while Castro Street does not. Cyclist traffic was higher on Market Street and lower on Castro Street on Saturdays. Even though Saturday had the majority of bike traffic on Market, the highest weekday numbers were during morning and evening commuting times, which would seem to indicate that commuters are a component of the cyclist contingent.



Fig. 23. Sign posted on Market Street



## Survey Findings

Counts, while valuable measures in quantifying activity levels of streets, provide no information about the perceptions of street users, the purpose of their visits, and their satisfaction with their experience on the street. The next section presents and discusses results from surveys conducted at 9th and Irving and in the Upper Market/Castro. An evaluation of eight aspects of the pedestrian realm on a scale of 1-7 (1=unsatisfied, 7= satisfied) is indicative of

the opinions of people regarding the physical conditions of the street. Commentary from respondents and personal observations support the findings of this study.

Fig. 24 summarizes the opinions of street users at 9th and Irving and in the Upper Market/Castro to the list of survey questions asked. When the mean values are compared between both streets, only two questions show any statistical difference between the opinions of respondents of both study areas at  $p = 0.05$  level. These are regarding respondents' satisfaction with the condition

of the sidewalk and their ease of walking.

Significant differences in mean response between Castro Street and Market Street were also found. The sidewalk parameters that were evaluated differently by respondents include everything except safety from vehicles and safety from other people. These findings will be discussed after a discussion of the two study areas.

No statistical differences were found in either study area at the  $p = 0.05$  level when mean values of responses to each question were broken down by age group or gender. In other words, all age groups and both genders showed similar levels of satisfaction to each question.

The following section discusses the responses to each question in detail from both study areas.

*How satisfied are you with the attractiveness of this street regarding sidewalk materials, lighting, benches, trees and greenery?*

This question focused on the physical elements of the pedestrian realm, such as the sidewalk and not the road surface or

Survey Question: Satisfaction with:	9th and Irving Mean Response	Upper Market/Castro Mean Response
Attractiveness **	4.28	4.43
Condition* **	4.91	4.01
Cleanliness**	4.31	3.93
Places to stop and relax**	3.64	3.64
Safety from vehicles	4.52	4.51
Safety from other people	5.93	5.86
Ease of walking* **	5.59	5.13
Overall **	5.61	5.31

\*Statistical difference between mean response value for 9th and Irving and Upper Market/Castro  
 \*\* Statistical difference between mean response value for Castro St and Market St

Fig. 24. Summary Table of Responses to Survey Questions from 100 Surveys from 9th and Irving and 100 Surveys from Upper Market/Castro

The pedestrian realm generally refers to the pedestrian right-of-way on a street, which is typically the sidewalk and intersection crosswalk. However, this study focuses on the sidewalk. While both sidewalk and crosswalks are essential to pedestrian circulation, crosswalks cannot accommodate the same design elements as sidewalks, such as trees and benches, which were important in the investigation of attractiveness. Crosswalks are a different element that warrants separate investigation and discussion that this study does not undertake.



buildings. Clarification was often necessary to try to focus respondents on the physical design of the sidewalks rather than on design or composition of businesses or questions of sidewalk condition and cleanliness, which were dealt with in subsequent questions.

Respondents at 9th and Irving and in the Upper Market/Castro were somewhat satisfied with the attractiveness of the pedestrian realm, with mean response values to this question 4.28/7 and 4.43/7 respectively (Fig. 24).

When analyzed separately, however, Castro Street had a mean response value of 3.66/7 for attractiveness, while Market Street had a mean of 5.20. This statistically significant difference is not surprising, given the fact that the Market Streetscape was improved substantially approximately ten years ago through the planting of Canary Palms in the median and London Plane Trees in the sidewalks, and through the installation of a new brick sidewalk. It has a unified design that Castro Street is lacking. The main suggestion survey respondents had for Castro Street was greening.

At 9th and Irving, many respondents



called for more trees and greenery. Some also called for better lighting at night and expressed that they found the overhead power lines (for MUNI) to be unsightly. Others commented that the sidewalk was



Fig. 25. Window Shopping, Market Street

not attractive and that there was no cohesive design for the neighborhood streetscape or buildings.

Clarification was often necessary to try to focus respondents on the physical design of the sidewalks rather than on design or composition of businesses or questions of sidewalk condition and cleanliness which were dealt with in subsequent questions.



Fig. 26. Empty Tree Pit, Castro Street

*How satisfied are you with the condition of the sidewalk (regarding maintenance, cracks, and evenness)?*

There was a statistical difference in the mean response to this question, with respondents at 9th and Irving rating the parameter more positively than respondents in the Upper Market/Castro (4.91/7 versus 4.01/7 respectively). Market Street was scored significantly higher than Castro Street but, surprisingly, not higher than 9th and Irving.

Respondents on Castro Street who volunteered commentary generally talked about the fact that the sidewalk condition on

that block is below average. Opinions as to just how bad it was were variable; however, when analyzed separately from Market Street, Castro Street had a mean response of 3.2/7 as compared with 4.82/7, which are statistically different means. Tree roots were blamed by a couple of people for the unevenness and cracking.

Commentary from respondents at 9th and Irving was quite variable, ranging from people who found unevenness to be dangerous to those who thought the sidewalk was fine. 9th Avenue between Lincoln and Irving seemed to generate the least amount of concern as regards sidewalk condition.



Fig. 27. Paper Litter Scattered by the Wind at 9th and Irving

### *How satisfied are you with the cleanliness of the sidewalk?*

Sidewalk cleanliness was rated higher at 9th and Irving than it was in the Upper Market/Castro (4.31/7 versus 3.93/7). Some concerns were expressed about sidewalk staining (particularly on Irving Street and 9th Avenue between Irving and Judah). There was limited concern about litter. However, one of the most common sentiments expressed was that the merchants and the city do a good job keeping the neighborhood clean.

Some respondents on Castro Street mentioned that select merchants hose down the section of sidewalk in front of their businesses. This cleaning was observed on more than one day on both Market and Castro Streets. A person hired by the Merchants Association of Upper Market/Castro was also seen in action cleaning the sidewalk more than once on both streets. One person surveyed on Castro Street expressed that the street cleaning is insufficient to manage the large volume of pedestrian traffic.

Even with this cleaning and variable

commentary on the surveys, respondents rated Castro Street very poorly at 3.12 as compared with Market Street's mean score of 4.74. When analyzed separately from Castro Street, Market Street had a higher score than 9th and Irving.

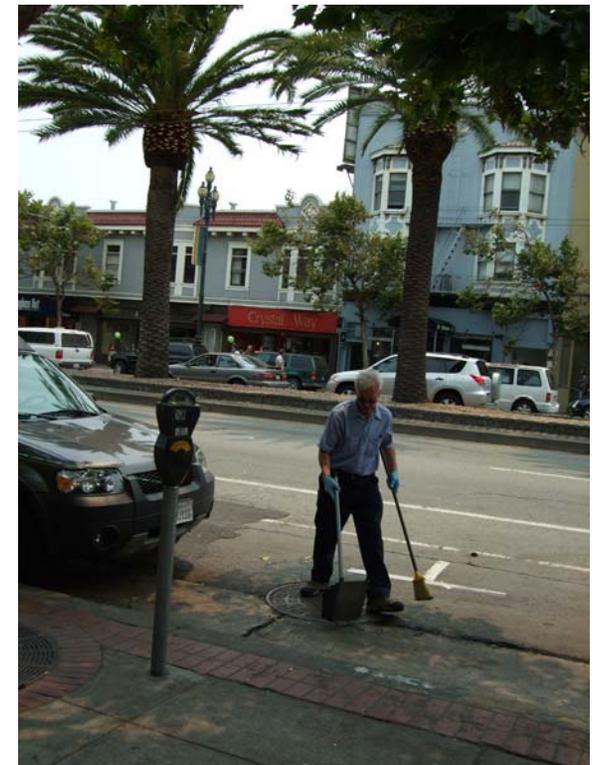


Fig. 28. Contracted Street Cleaner at Work, Market Street



*How satisfied are you with the opportunities to stop, relax, and socialize on the street?*

As a measure of the quality of public space and public life it supports, both study areas did poorly in terms of offering the opportunities to stop, relax, and socialize on the street. The mean response to this question was the same for both study areas, 3.64/7, which falls on the unsatisfactory side of the scale.

The commentary obtained in the surveys suggest that street users who frequent 9th and Irving are generally not accustomed to socializing on the sidewalk, because the spaces on these streets do not suggest or facilitate these activities; either the sidewalk is narrow or the spaces to stop are limited or uncomfortable. At 9th and Irving, the majority of respondents recognized that there were few to no public places to stop and relax in the neighborhood. Some people thought that seating provided by private establishments was sufficient. Others did not comprehend a personal or general need for public seating in the area. However, the majority of respondents indicated a desire for more seating and, specifically, more public seating.



Survey respondents in the Upper Market/ Castro also acknowledged a lack of seating and some expressed a desire for more seating; however, this desire was not as common as it was at 9th and Irving. Several people mentioned that people stand and socialize on Market and Castro Streets and some thought this to be sufficient. One person highlighted the fact that the Harvey Milk Plaza is underutilized. When evaluated as individual streets, Castro Street scored significantly lower than Market Street for opportunities to stop, relax and socialize. This may have to do with the narrowness of the sidewalk and the high amount of foot traffic. It may also have to do with the lack of outdoor café seating on Castro Street.



Fig. 29. Late night socializing indoors, 17th Street

*How satisfied are you regarding your personal safety from vehicles?*



Fig. 30. Reconciling Modes of Transit, 9th and Irving

This question attempted to assess people's level of satisfaction with their own safety as they walked on the sidewalk or crossed the street at intersections. Average response was nearly identical at both study areas at 4.51 and 4.52, indicating that people were at least somewhat satisfied with their personal safety from vehicles. This is also one of the only two parameters for which Castro and Market Streets did not have statistically different mean responses.

Comments on safety from vehicles were variable at 9th and Irving, but many focused on the intersection of 9th and Irving and the fact that there is a lot going on there with pedestrians, cars and the MUNI. The surveys showed a mixed response to a new traffic signal that integrates the MUNI. Some people found it very helpful, while others were confused. Other concerns had to do with people driving fast and aggressively. Suggestions were made for more 4-way stop signs on Irving and for a dedicated right-hand turn from Irving onto 9th Avenue, to help minimize congestion at this intersection.

The most popular concern in the Upper Market/Castro was the pedestrian crossing at the intersection of Castro, Market and 17th Streets. Some respondents found this crossing to be confusing and dangerous. Multiple concerns were also expressed regarding the safety of the intersection at the other end of the block of Market Street (Market, Noe and 16th Streets).



Fig. 31. The Intersection of Concern: Market, 17th, and Castro Streets



Fig. 32. Pedestrian Contemplates Intersection of Market, Castro and 17th Streets

*How satisfied are you with your personal safety from other people?*

The mean response for personal safety from other people was the highest of any parameter for both study areas, as well as for Castro and Market Streets individually. At 5.93 for 9th and Irving and 5.86 for the Upper Market/Castro, the means indicate a high level of satisfaction.

Anecdotal evidence of muggings was mentioned a few times in the Upper Market/Castro, which was more than it came up at 9th and Irving. This may be due in part to the fact that high volumes of foot traffic can facilitate low-profile theft.

The only concerns that came up with some regularity at 9th and Irving were in regards to certain street people who were drunk, mentally ill or aggressively panhandling.

The fact that these concerns were mentioned more frequently by respondents at 9th and Irving than by those in the Upper Market/Castro was initially surprising, given the fact that there are more street people in the second neighborhood. However, a feeling of safety may come from becoming



accustomed to the quantity of street people. It may also be attributed to a consistently high volume of traffic on Castro Street, leading to the perception of safety because of more “eyes on the street.”

*How satisfied are you with the ease of walking down the sidewalk (regarding sidewalk width, objects in the way, or other people)?*

Ease of walking is the second parameter for which mean responses were statistically different between the two study areas. At 5.59/7 at 9th and Irving, the mean response rate is higher than 5.13/7 in the Upper Market/Castro. There is also a significant difference between Castro and Market Streets for this parameter and, if Castro Street were removed from the comparison, Market Street would be rated more satisfactorily than 9th and Irving.

As mentioned in the Pedestrian Traffic section, Castro Street was experiencing crowding during three hours of Saturday afternoon according to the definition cited in the Pedestrian Traffic section. Castro Street as well as Irving Street and 9th Avenue between Irving and Judah, have nine feet

of usable sidewalk width, as compared with twelve feet on Market Street and on 9th Avenue between Lincoln and Irving. However, Castro is the only block to exceed 4 people per minute per linear foot of usable width.

The biggest concern at 9th and Irving was crowding at bus shelters, particularly at

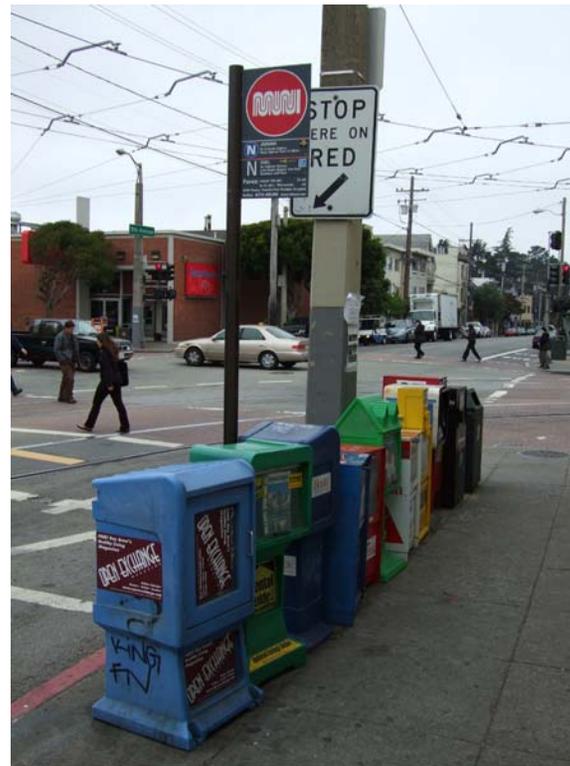


Fig. 33. Newspaper Stands at 9th and Irving

the stop on the southeastern corner of 9th and Irving, in front of Jamba Juice. A small number of respondents expressed disapproval for an abundance of newspaper stands, utility boxes and other obstructions. Some people explicitly commented that the sidewalks were wide enough and that they did not mind navigating around outdoor café seating, as it was an amenity they appreciated.

In the Upper Market/Castro, respondents pointed out that Castro Street can be particularly crowded and that the sidewalk is not wide enough to accommodate groups of people walking or strollers stopping to browse the storefront windows.

The area in front of Walgreen’s at Castro and 18th was mentioned by one respondent as a congestion problem because of the activity in and out of the store, people waiting to cross the street or waiting for the bus, and street people camped out next to the kiosk.

Long lines of people waiting to see films at the Castro Theater were observed on multiple days. One merchant explained the need to use masking tape on the sidewalk as a way to keep the entrances of businesses



close to the theater clear. While people were cited as the major impediment to smooth walking on Castro Street, clutter in the form of business signage, café seating and planters were mentioned more often (but not often) as obstructions on Market Street.



Fig. 34. Waiting in Line at the Castro Theater

*How satisfied are you with your overall walking experience?*

The overall pedestrian experience was another parameter with a relatively high mean response (5.61 and 5.31 at 9th and Irving and Upper Market/Castro, respectively). The fact that neither area

attained a score of 6.0 or greater suggests there remains much room for improvement to the streetscape. When compared to one another, Castro and Market Streets had significantly different mean responses to this question.

## DISCUSSION

As mentioned earlier, the study areas, 9th and Irving and Upper Market/Castro, were chosen because they are two of San Francisco’s most popular neighborhood commercial districts. The results of pedestrian counts, stationary activity observation and surveys highlight basic trends in terms of where pedestrians come from, why they come, how many there are, and how satisfied they are with walking in the two study areas.

The methodology, particularly the quantitative survey, is limited. There is significant “solicitation fatigue” in both study areas because canvassers and organizers aggressively solicit signatures and donations on a regular basis. An effort was made to distinguish the purpose of this study from other solicitations. Over half

of survey respondents at 9th and Irving as well as Upper Market/Castro live within a mile of the study area. It is probable that local residents were more invested in sharing their input because they frequent the neighborhoods and want to contribute to any improvements or influence how tax dollars are spent or saved.



Fig. 35. Canvassing at Harvey Milk Plaza



Survey respondents rated their personal safety from vehicles similarly across all five sample sites. This question was more an indicator of the physical design of street crossings than of the sidewalk itself.

For example, Market Street was rated much higher than Castro Street for every parameter except safety from vehicles and safety from other people. The physical condition of Market Street is much better than Castro Street because of a recent redesign. However, pedestrians on both streets face dangerous and confusing crossings at intersections.

Many people surveyed did not recognize the street as a potential place to stop, relax, and socialize. This question would take people by surprise and sometimes require clarification suggesting that the concept of socializing on the sidewalk was foreign to many people. However, as shown by the results of the stationary activity observation, when restaurants or other establishments provided seating on the sidewalk, it was well-utilized. On the flip side, even with only the most basic of physical conditions in place, such as a safe sidewalk or a decent weather day, social interaction can occur,



and will happen largely independently of the quality of the physical setting. The survey conducted in 2007 attempted to correlate the frequency with which respondents encountered someone they knew with their satisfaction with opportunities to stop, relax and socialize. This parameter was eliminated from the 2008 survey because it seemed too ambiguous.



Fig. 36. Restaurant-provided seating on 9th Avenue being utilized

Similarly, while all of the survey questions are subjective, asking for a rating on the overall walking experience allowed people to filter out which of the previous seven parameters have an impact on their walking experience and which do not. For

example, one respondent gave a rating of 5 for attractiveness, 2 for condition and cleanliness, 4 for places to stop, 1 for safety from vehicles, 7 for personal safety and ease of walking and an overall rating of 7. The question also allowed respondents to factor in other variables that are outside of the focus of the study, such as architectural quality, mix of land uses, or the overall “feel” of the street. Both study areas are popular tourist destinations and have a strong sense of place for visitors and residents alike. 9th and Irving is popular because of its proximity to Golden Gate Park. Upper Market/Castro is popular because of its reputation for being a safe and welcoming place for gay and lesbian people.

There must be reasons for people to visit a street and spend time in the public space. Necessary activities, like running errands, shopping for essentials, and passing through are some of those reasons. However, these types of activities tend not to create a vibrant street life; people tend to go home rather than spend time on the street. A greater diversity of business establishments that encourages different kinds of people to come out at different times of day provides many other reasons for visiting a street, and seeds

the potential for a wider range of activities that make a street an attractive destination to occur. An inability to parse out these variables from the physical condition of the sidewalk is perhaps the greatest shortcoming of any study that does not include in-depth qualitative surveys with residents, visitors and merchants. Future work needs to address this question in a manner that does a better job of attributing responses solely to the physical environment.

This study involved the collection of a large amount of data. Unfortunately, time did not permit a thorough analysis of qualitative comments collected in the surveys. People surveyed were asked where they were coming from, where they were going, and what their favorite streets in San Francisco for walking were. However, time did not permit an analysis of any of this data. It was clear from the way respondents rationalized their choices of favorite streets for walking that the same difficulty of separating out physical design from mix of business establishments, beauty of the landscape or sense of place existed as it did for the questions about opportunities to socialize and overall walking experience in the two study areas.

Both study areas are successful if measured solely in terms of the large quantity of pedestrians counted. The fact that neither study area attained a score of 6.0 or greater for any survey parameter, however, suggests there remains much room for streetscape enhancement. Both study areas would benefit from a host of improvements to the attractiveness, condition, and cleanliness of the sidewalks. Streetscape improvements would better accommodate necessary pedestrian activities like waiting for transit. They would also give the neighborhoods more potential for increased social and leisure activity such as sitting outside and socializing at private establishments as well as on public benches. Such improvements to the public realm could also enliven commercial activity at both 9th and Irving and Upper Market/Castro.

## CONCLUSION

The present study has collected data on pedestrian volumes, stationary activities, and cycling traffic at 9th and Irving and Upper Market/Castro. It has also solicited the opinions of street users on a host of issues regarding the quality of the pedestrian

environment. This study serves as the basis for comparisons of future studies of these streets and in investigating how streetscape improvements affect the perceptions and use of the pedestrian realm. The methodology should be refined in future studies to separate physical streetscape condition from other abovementioned variables.

## ENDNOTES

<sup>1</sup>Towards a Fine City for People, Public Spaces and Public Life – London, Copenhagen, Denmark, Gehl Architects, 2004.

