Economic Effects of Traffic Calming on Urban Small Businesses

Emily Drennen

415/863-2248
EmilyDrennen@yahoo.com
1383 Minna Street, San Francisco, CA 94103

Abstract

This study investigates how changes to the streets and sidewalks in urban areas to make them safer, more attractive, and more livable ("traffic calming") affect retailers in highly urbanized areas. For this study, twenty-seven merchants located in the Mission District of San Francisco were interviewed about how the Valencia Street bicycle lanes have impacted their businesses. Four and a half years after the bike lanes were built, the vast majority of the interviewees expressed support for the bike lanes. Sixty-six percent of the merchants believe that the bike lanes have had a generally positive impact on their business and/or sales, and the same percentage would support more traffic calming on Valencia Street. Thirty-seven percent of merchants reported that the bike lanes have increased their sales. Seventy-three percent thought that the bike lanes have made the street more attractive. Surprising percentages of merchants reported that increased congestion (41%) and reduced auto speed (46%) were good conditions for business. On eleven of the nineteen variables, not one merchant reported that the bike lanes had made conditions "worse", while only 6% of the overall responses were negative. Even though very few merchants thought that the bike lanes had any negative effect on their business, it should be noted that nearly all of them mentioned the importance of customer parking, and 39% felt that delivery access had worsened.

Traffic calming projects could be approved with fewer impediments, lower costs, and with more community support if transportation engineers, city planners, and advocates were able to provide more effective outreach campaigns and tools for small businesses (including empirical data showing how traffic calming measures have improved small business conditions). The results from this study will be used to develop outreach materials about traffic calming targeted to urban small businesses.

Introduction

This study investigates how changes to the streets and sidewalks in urban areas to make them safer, more attractive, and more livable ("traffic calming") affect retailers in highly urbanized areas. Traffic calming aims to reclaim public space through engineering tools that reduce auto speed and create safer streets for pedestrians, bicyclists, transit riders, and other road users. Traffic calming began in Europe in the 1960's and 1970's as a fledging concept and was introduced to a few US cities in the late 1970's to 1980's (Ewing, 1999). Traffic calming is part of a new movement in transportation engineering that is more multi-modal in focus (buses, bikes, pedestrians, etc.) and less auto-centric than previous engineering trends. Common traffic calming techniques and tools include speed bumps, crosswalk widening, better signals or signs, new street trees or landscaping, bike lanes, and reconfiguring or narrowing streets.

Since traffic calming is a new concept, members of the public are often wary of change. Typically, because usually 50-70% of residents must initially approve before any traffic devices are laid in the pavement (Ewing, 1999, p. 164), voiced opposition can effectively stop a traffic calming project in its tracks. Small business owners are often the most vocal opponents of traffic calming projects because of fear of lost revenue from changes to the streetscape. Small business support can be a significant factor in whether a traffic calming project is abandoned or approved.

Some research suggests that traffic calming projects can actually *improve* business conditions and raise revenues for small businesses (Lockwood, 1998). In fact, business owners in areas that have previously received traffic calming measures can become some of the most vocal champions of this work. However, business owners in areas being studied for traffic calming are often not aware of how well these measures have worked for their counterparts across town and in other jurisdictions. If transportation engineers, city planners, and advocates were able to provide more effective outreach campaigns and tools for small businesses (including empirical data showing how traffic calming measures have improved small business conditions), traffic calming projects might be approved with fewer impediments, lower costs, and with more community support.

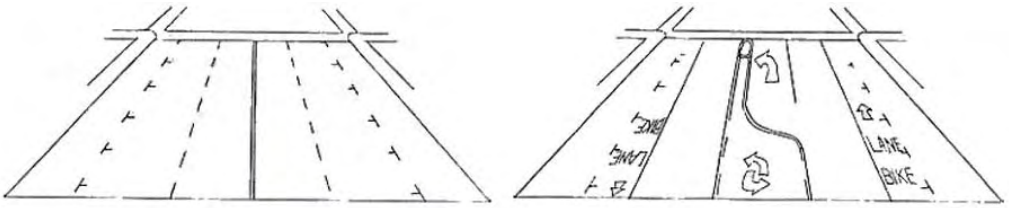
The following arguments are in favor of traffic calming from the perspective of a small business owner in an urban area:

1. *Economic Revitalization and Property Values* –Traffic calming can increase residential and commercial property values, which attracts wealthier residents to the area (gentrification) and can increase retail sales and bring economic revitalization to a commercial corridor.
2. *Livability and Safety* – Traffic calming creates more attractive environments, reduces auto speed, and increases safety for pedestrians, bicyclists, drivers, and other users of the street, which is good for business.
3. *Sales and Attracting Customers* – Traffic calming encourages local residents to buy in their own neighborhoods, and also attracts customers from a wider area due to reduced travel time, hassle, and cost. Traffic calming can also help people live less car-dependent lifestyles, which will increase the amount of discretionary income they can spend on things other than transportation.
4. *Parking* – Most businesses are concerned about the quality and quantity of customer parking and access for delivery trucks. Finding the right amount and kind of parking supply is key.
5. *Impact on Employees* – Poor bicycle, pedestrian, and transit conditions can harm businesses by losing worker time and productivity to gridlock, and by impairing employee recruitment. Conversely, improved transportation facilities can provide more convenience for employees.
6. *Construction and Costs* – Traffic calming projects often require only minimal "down time" for construction, and most do not require any investment from business owners.

Methodology of the Valencia Street Bike Lane Merchant Survey

Valencia Street is located in a dynamic part of San Francisco's Mission District, a primarily low-income, working-class, and immigrant neighborhood. The street teems with pedestrian, bus, bike, and auto activity along its length, and the vast majority of developments are mixed-use, with residential units over street-level retail. Prior to the installation of the bike lanes in March 1999, Valencia Street had two auto traffic lanes in each direction. The street was then converted into one traffic lane and bike lane in each direction, with a turning lane down the middle of the road. Curbside parking was not impacted. (See Figure 1.)

Figure 1 – Drawings of Valencia Street Before and After the Bike Lanes

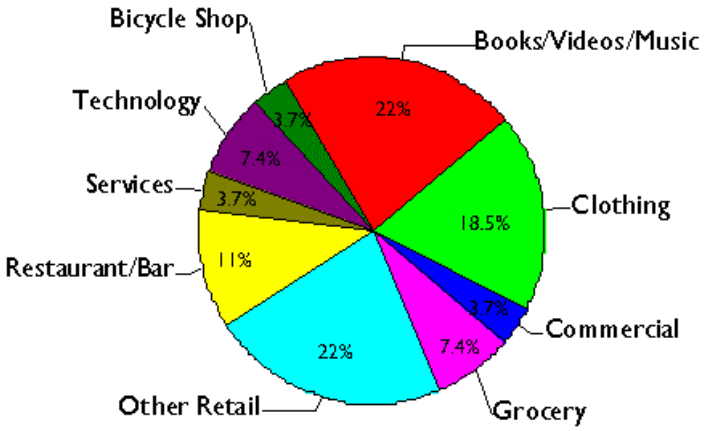


Before *After*

Source: Sallaberry, 2000, p. 20

This case study involved administering an in-person survey instrument to gather information from selected small businesses in the service, food, or retail sectors located within the study area (Valencia Street between 15th and 25th Streets). Residential, office, industrial, and other commercial establishments were excluded from this study. Book/video/music stores, clothing stores, and stores in the "other retail" category account for nearly two-thirds of the businesses interviewed (Figure 2). The survey instrument is shown in Figure 3.

Figure 2 – Types of Businesses Interviewed



The merchants were selected through a modified random process[1] based on planning blocks assigned by the San Francisco Planning Department. An on-street census of the project area found a total of 122 eligible businesses, of which 27 were interviewed (22%) as part of this study. One owner, manager, or employee per business was interviewed; nearly 90% of the interviewees were either owners or managers, which is helpful in establishing the validity of their answers. The businesses interviewed for this study have been located on Valencia Street from a low of less than a week to a high of more than 49 years, with an average of 11.7 years. The

[1] Random selection was ensured through selecting planning blocks through use of a random number generator. In certain cases when the planning block selected did not include a business eligible for this study, nearby businesses were substituted.

interviewees have been with their businesses for between three months and 23 years, with an average of 7.6 years. The long tenures represented by these results lend validity to the responses in this survey.

Figure 3 – Valencia Street Bike Lane Merchant Survey

Date of Interview:_____
Business Name: _____
Business Address: _____Cross Street:_____
Business Type:_____
Name of Interviewee: _____
Title: *Owner Manager Other Employee Other*
Number of years with business:_____
Year business opened on Valencia St:_____

1. Do you remember what your reaction was when bike lanes along Valencia Street were first proposed?
2. How did the majority of the other merchants along Valencia Street felt about the bike lanes before they were built?
3. What do you think the majority of the other merchants along Valencia Street think about the bike lanes now that they have been in place for 4 years?
4. What were your hopes and/or concerns about the bike lanes?
5. Have your views about the bike lanes changed at all since then? If so, when?
6. Which of these groups, if any, affected your views of the bike lanes? *Choose all that apply:*

The Department of Parking and Traffic	The San Francisco Bicycle Coalition
Merchant Groups/Civic Organizations	Other Valencia Street Merchants
Customers/Neighbors	The Media
Other:	None

7. How did these groups affect your views?
8. Which of the following benefits have you seen as a result of the bike lanes? *Choose all that apply:*

Increased/Reduced economic revitalization for area	Middle lane is good for (illegal) double parking?
Increased commercial/residential property values?	More/less convenient for employees
Increased/Reduced sales	Better/Worse access for delivery trucks
Increase in shoppers who are bikers?	Reduced auto speed has increased sales?
More/Fewer walkers on sidewalks and window shopping	Increased/Decreased availability of parking for customers
New customers from outside of the neighborhood?	Construction of bike lanes was disruptive?
More/fewer area residents shopping locally	Made street safer for walkers?
Increased traffic congestion along Valencia Street-bad/good?	Made street nicer and prettier or less appealing?
Increased traffic congestion on streets nearby-bad/good?	Other:

9. Apart from what the economy has done in the past few years, do you think that the bike lanes have had a generally positive or negative impact on your business' sales?
10. Would you be supportive of more traffic calming (such as tree planting, sidewalk widening, and improvements for buses) on Valencia Street?
11. What would you tell merchants in other areas of the city who were just learning about traffic calming efforts for their area?
12. Anything else to add?

Results of the Valencia Street Bike Lane Merchant Survey

The results of the Valencia Street Bike Lane Merchant Survey are displayed in Table 1. For ease of data analysis, the Valencia Street Bike Lane Merchant Survey responses were re-coded into standardized categories (where "Better" represents a situation where a variable was beneficial, "Worse" where it had a negative impact, "Balanced" where it had both positive and negative effects, "No Effect" where it had no impact, and "Don't Know").

Four and a half years after the bike lanes were built, the vast majority of the interviewees expressed support for the bike lanes. Sixty-five percent of the merchants believed that the bike lanes have had a generally positive impact on their business (Figure 4), and the same percentage would support more traffic calming on Valencia Street (Figure 5). Only one merchant said that the bike lanes had had a negative effect "but only very faintly so." None were opposed to the idea of more traffic calming.

Thirty-seven percent of merchants reported that the bike lanes have increased their sales. Seventy-three percent thought that the bike lanes have made the street more attractive. Surprising percentages of merchants reported that increased congestion (41%) and reduced auto speed (46%) were good conditions for business. On eleven of the nineteen variables, not one merchant reported that the bike lanes had made conditions "worse", while only 6% of the overall responses were negative. Even though very few merchants thought that the bike lanes had any negative effect on their business, it should be noted that nearly all of them mentioned the importance of customer parking to their businesses, and 39% felt that delivery access had worsened.

Figure 4 – General impact the bike lanes have had on interviewees' businesses

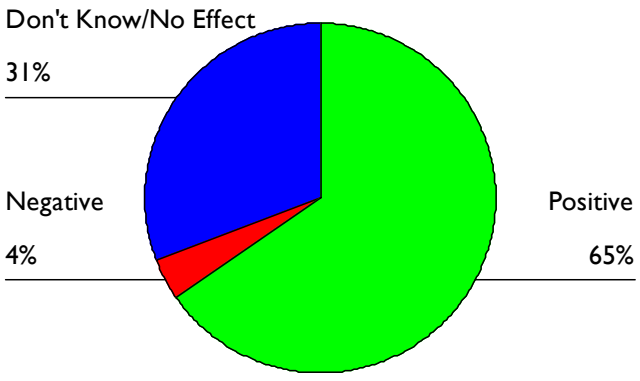


Figure 5 – Interviewees' support for more traffic calming on Valencia Street

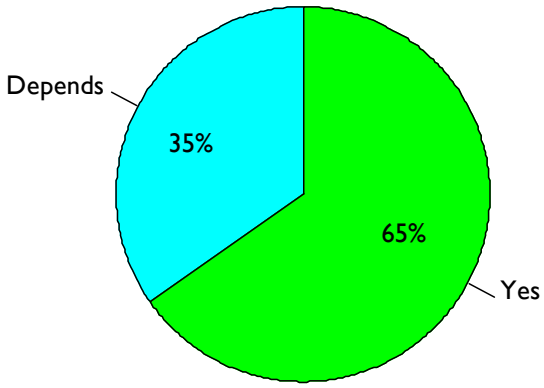


Table 1 – Valencia Street Bike Lane Merchant Survey: Summary of Results

Impacts of Traffic Calming	Better	Worse	Balanced	No Effect	Don't Know
Economic Revitalization and Property Values					
Economic revitalization for area	44%		4%	30%	22%
Commercial/residential property values	15%			52%	33%
Livability and Safety					
Attractiveness of street [2]	73%			23%	4%
Effect of reduced auto speed on sales [2]	46%	8%	4%	39%	4%
Effect of traffic congestion on Valencia Street	41%	7%	26%	22%	4%
Effect of traffic congestion on nearby streets	22%	11%		52%	15%
Pedestrian safety [2]	62%			35%	4%
Sales and Attracting Customers					
Sales	37%		4%	30%	30%
Pedestrian activity	22%			63%	15%
Number of customers who ride bicycles	63%			30%	7%
Area residents shopping locally	56%		4%	33%	7%
New customers from outside the neighborhood	44%			44%	11%
Parking					
Customer parking [2]	15%	12%	4%	65%	4%
Access for delivery trucks [2]	35%	39%	12%	12%	4%
Use of middle traffic lane for double parking	70%	15%	7%	7%	
Impact on Employees					
Convenience for employees	67%			30%	4%
Construction and Costs					
Effect of bike lane construction on business [2]		12%	12%	46%	31%
Summary Questions					
General impact on business and sales [2]	65%	4%	0%	31% *No Effect/Don't Know*	
Supportive of more traffic calming on Valencia St. [2]	65% *Yes*	0% *No*	35% *Depends on the Project*		

Numbers may not add to 100% due to rounding.

[2] For these questions, the sample size was n=26 because one merchant was unable to finish the interview due to lack of time. However, the other answers he gave were very supportive of the bike lanes.

Conclusions and Next Steps

This project focused on how traffic calming practices affect retail businesses in urban areas. The Valencia Street Bike Lanes Merchant Study found support for most of the findings in the literature for why traffic calming benefits small businesses. Specifically, a majority of the Valencia Street merchants reported that the bike lanes increased the attractiveness of the street, increased pedestrian safety, increased the numbers of customers who ride bikes, increased the number of residents who shop locally, and increased employee convenience. Merchants also strongly supported other positive impacts the bike lanes have had on businesses, although not by a majority. Some of these included increased revitalization for the area, increased sales from reduced speed, benefits from increased traffic congestion along Valencia Street, and increased numbers of customers from outside the neighborhood. Overall, two-thirds of merchants felt that the bike lanes had a generally positive effect on their sales, and also would support more traffic calming projects on Valencia Street. It is also important to note that very few merchants (no more than two merchants on any of the variables) reported that the bike lanes had any sort of overall negative impact on their business. These results definitively show strong merchant support for the bike lanes.

More extensive research into retailers' attitudes about traffic calming efforts, both before and after project implementation, would be helpful in understanding more clearly what is important to small businesses and how best to meet their unique needs. Econometric studies (especially based on annual tax receipts, assessed property values, and rents for multiple jurisdictions) could perhaps more definitively determine what benefits traffic calming brings to urban small businesses. This approach could be especially helpful for the variables that the merchants in this study were reluctant to credit the bike lanes for improving (such as property values and sales).

Outreach brochures and public presentations should be developed for an audience of urban small businesses, which should provide general information about traffic calming, information about how traffic calming has affected other merchants, and how the proposed project would specifically impact their businesses. Business owners could then use this information to make informed decisions about whether to support the project. Hopefully, information of this kind would reduce initial opposition and increase community support for traffic calming projects. This could, in turn, reduce the time and costs required for project implementation, which could then increase the number and scope of traffic calming projects a jurisdiction is able to complete. Community involvement in transportation planning could also be positively impacted.

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