
Customers who arrive by automobile spend the most per visit across all of the establishments, but cyclists spend the most per month. These results suggest that marketing to cyclists is likely to generate a positive expenditure return for businesses in the right context.


The businesses in the sample perceived that bicyclists, on average, account for one quarter (24.8 percent) of their total customer base. More than two thirds responded that they have seen the demand for bike parking rise.

3. Why Bicyclists are better customers than drives for local businesses. 2012. DC.Streetsblog.org

Far and away, the biggest reason business owners resist the addition of bike infrastructure is that they’re afraid it will limit parking. Once they realize they can get 12 bike parking spaces for each car spot, sometimes they begin to change their tune.

“We tend to shop closer to home and shop more often,” said April Economides, a consultant who helped the city of Long Beach, California build bicycle-friendly business districts.

Cyclists travel at what Portland Bike Coordinator Roger Geller calls a “human-scale speed” that allows them to “stop and buy something.”

4. Rocco’s a Surprise Bike Magnet. 2013. TucsonVelo.org

Rocco’s is really bike-friendly with space for 14 bikes - Wednesday is his peak bike day, but about half of his staff regularly rides to work and many customers from the adjacent neighborhoods ride in as well.


The properties in the flexible parking requirement area generated eight times more sales tax revenue per parcel square foot than the properties in the standard parking requirement area. Not only that, the businesses on those parcels generated all that sales tax revenue with a fraction of the onsite parking. These are exactly the areas where we don’t need to require every business to operate as if every patron will drive alone in a car. On the contrary, we should be encouraging trips by foot, bike and transit in these neighborhoods. In fact, our decades- old parking requirements have encouraged driving and traffic, and they have degraded the pedestrian environment.
Cycling is on the rise across the United States, and its popularity has grown beyond the usual leaders—Portland, Oregon; Seattle, Washington; Davis, California; Minneapolis, Minnesota; and Boulder, Colorado. Other cities making significant investments in bike infrastructure in recent years include New York City; Chicago, Illinois; and Washington, D.C.—all three have realized substantial growth in the numbers of people taking to the streets on two wheels.

New York City has added more than 200 miles to its bicycle network, for example, and the number of bicycle commuters has more than doubled since 2007 (1). Many other cities, large and small, are eyeing these successes and recognizing the potential of cycling as a viable mode of transportation for their communities.

Although improvements that support bicycling can offer benefits such as reduced congestion, improved air quality, and healthier communities, many question the economic impacts, specifically for the business community. Some evidence supports the assertion that bicycling is good for business, but many business owners express concern that cyclists...
are not a lucrative market compared with customers who arrive by automobile. They argue that efforts to cater to cyclists—such as increasing bicycle parking and adding bike lanes—can hamper access for automobiles and that an economic return from new facilities is not guaranteed.

Empirical evidence to settle these claims is lacking, but anecdotal evidence points to an increasing awareness of the benefits that bicyclists bring to local businesses—for example, some businesses have made concerted efforts to cater to bicyclists, including the addition of features that support cycling, as well as programs or services for cyclist customers. A few emerging studies are working to understand the returns on these investments for businesses and for the community at large.

**Returns on Investments**

Several studies have aimed at understanding the influence of bicycle tourism and the cycling industry—such as bicycle manufacturers, retail and repair shops, and clothing merchandisers—on local and regional economies. Fewer studies have focused on the cyclist as a consumer and on the potential economic benefits to specific types of businesses.

**Industry, Retail, and Tourism**

Research into the benefits of recreational bicycling and bicycle tourism has tracked expenditures directly related to bicycle equipment or to travel-related food and lodging. A study of the Outer Banks in North Carolina estimates that tourists who come to the area specifically for bicycling generate approximately $60 million a year for the local economy, nine times the cost of constructing the bicycle facilities in the area (2). More than half of the visitors on the Greenbrier River Trail in West Virginia spend more than $100 per visit and most come from out of state (3). According to a recent study, the revenue generated by recreational cyclists and by bicycle tourism in Wisconsin amounts to nearly $1 billion annually (4). Colorado similarly estimates the impact of cycling by out-of-state tourists and active residents at $1 billion (5).

Some analyses have examined the bicycle manufacturing, retailing, and service sectors of the economy. Wisconsin claims nearly 20 percent of the bike manufacturing in the United States; the industry contributes $556 million annually to the state economy (6). In 2008, bicycle-related industries in Portland accounted for $90 million in direct economic activity, with 60 percent coming from the retail, repair, and rental sectors (7). Since 2006, these industries have grown by 50 percent and provide 850 to 1,150 jobs in Portland.

Several other studies have focused on the perceptions of business owners about efforts to discourage driving or to improve nonautomobile access to commercial districts. In some cases, business owners reported that restrictions to vehicular traffic to improve facilities for cyclists or pedestrians had a positive impact on their businesses. For example, business owners on a street in San Francisco, California, noted that the installation of bike lanes increased the number of customers arriving by bike and had improved sales or had no impact on sales (8). Businesses located near bicycle parking corrals in Portland estimated that one-quarter or more of their customers arrived by bicycle (9).
Research into grocery shopping patterns showed that bicyclists spend less than automobile drivers, especially when they travel long distances to reach the store; however, bicyclists, pedestrians, and transit users shop more frequently.

**Spending Patterns**

Few U.S. studies have documented the interrelationships between mode, expenditures, and frequency of trips. In Seattle, researchers studied the mode choice of customers for trips to the grocery store (10). The results showed that stores in higher-density neighborhoods had a higher likelihood of shoppers using an alternative mode of transportation or transit. A survey in a commercial corridor in San Luis Obispo, California, revealed that consumers arriving by bike spent similar amounts yet visited more frequently than those who arrived by car (11). Internationally, studies from Münster, Germany (12), and from Utrecht (13) and Amsterdam (14) in The Netherlands have found that cyclists spent less per visit to a business but visited the business more frequently, which results in higher spending patterns over time.

U.S. researchers are beginning to explore this topic, working to measure the value of the cyclist as a customer for local establishments. At the University of Minnesota, a local economic activity study is conducting surveys and interviews of businesses near Minneapolis bike-share stations to collect information about changes in sales and in customer activity; bike-share system users are asked about their expenditures at local businesses. The data collected will be used to associate bike-share use patterns with consumer-oriented business activity.

Portland State University researchers recently collected survey information about customers and their transportation to various establishments, including high-turnover restaurants, convenience stores, and drinking establishments across the greater metropolitan area (see sidebar, page 29, for details and preliminary results). The study aims to provide answers about the links between the mode of travel to these destinations, the amount spent, and the frequency of trips, while controlling for income, urban form, the transportation environment of the establishment, the number of persons in the household, and other factors.

**Supermarket Data**

As part of this effort, the researchers analyzed survey data collected independently by a supermarket chain on customer travel choices to 10 stores across the Portland metropolitan region (15). The limited data included information about the store’s location, the residential locations of customers, the time of day and the day of week, the mode of travel to the store, and expenditures on that day.

The findings revealed that customers who traveled by automobile to the grocery store spent more per trip compared with those who arrived by bike, walking, or transit. Cyclists spent approximately $13 less per visit than automobile patrons. Results also highlighted the importance of bicycle infrastructure, urban form, the distance from home to the store, and the day of week in the choice to bike.

In addition, cyclists who traveled farther spent approximately $5 less per mile of travel. No information was collected on the frequency of trips; therefore, the expenditures of customers across modes cannot be evaluated over longer time periods. The same grocery chain, however, collected data more recently that included the frequency of trips, and the preliminary results suggest that customers who walked, biked, and rode transit shopped more frequently.
Exploring the Relationship Between Consumer Behavior and Mode Choice

KELLY J. CLIFTON, SARA MORRISSEY, AND CHLOE RITTER

Researchers at Portland State University are studying the relationship between mode choices and customer expenditures. Funded primarily by the Oregon Transportation Research and Education Consortium, the study aims to provide a quantitative analysis of the connections between consumer spending and travel behavior.

During the summer of 2011, patrons of restaurants, bars, and convenience stores in different urban settings throughout greater Portland were asked to complete short surveys as they exited the establishments. Survey results suggest that patrons who arrive by automobile do not necessarily convey greater monetary benefits to businesses than bicyclists, transit users, or pedestrians. This finding is contrary to what business owners often believe. Nevertheless, motorists comprise the largest share of customers across establishment types and urban contexts.

Results from all establishment types show that customers who arrive by automobile spend more on average per trip than others (see Table 1). Taking the frequency of visits into account, however, reveals a different result—cyclists are greater spenders on average. The monthly differences are not statistically significant, however, and suggest that business owners may not realize gains by appealing to customers solely on their mode choices.

When consumer expenditures by mode of travel are examined in the context of the establishment’s location, statistically significant differences emerge. The contexts include central business district (CBD); urban core—the central city outside of the CBD; neighborhood centers—commercial centers within neighborhoods; and low-density suburban business districts. Establishments in the urban core receive the highest average expenditures per visit across all modes at $14.55, followed by establishments in neighborhood centers at $11.55, in the CBD at $11.07, and in suburban contexts at $10.08 (see Figure 1). Patrons who arrive by automobile spend more per visit in all urban contexts, but the expenditures vary across contexts for consumers who travel by other modes.

The study includes different types of establishments—high-turnover restaurants selling pizza and Mexican food, convenience stores, and bars. The average expenditures vary significantly across these different establishment types, as shown in Table 1. Convenience stores have the lowest average expenditures per visit at $7.36 but the highest average expenditures per month, at $80.40, because of the frequency of visits. Customers who arrive by automobile spend the most per visit across all of the establishments, but cyclists spend the most per month.

These results suggest that marketing to cyclists is likely to generate a positive expenditure return for businesses in the right context. Profit margins and net gains must be evaluated on the basis of operating costs, which vary by location and space requirements. More evidence is needed to provide more conclusive direction for economic development. This ongoing study will examine the findings more closely, controlling for establishment characteristics, customer demographics, and the built environment near the business in disaggregate models of expenditures.

### TABLE 1 Average Customer Expenditures by Mode of Travel and Type of Establishment

<table>
<thead>
<tr>
<th>Mode</th>
<th>Establishment</th>
<th>Trips per Month</th>
<th>$ per Trip</th>
<th>$ per Month</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Bar</td>
<td>1.6</td>
<td>25.55</td>
<td>40.21</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Convenience</td>
<td>9.9</td>
<td>7.98</td>
<td>79.37</td>
<td>543</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td>2.2</td>
<td>18.74</td>
<td>41.16</td>
<td>409</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.5</td>
<td>13.70</td>
<td>61.03</td>
<td>1,040</td>
</tr>
<tr>
<td>Bike</td>
<td>Bar</td>
<td>4.9</td>
<td>14.08</td>
<td>68.56</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Convenience</td>
<td>14.5</td>
<td>7.30</td>
<td>105.66</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td>3.5</td>
<td>12.08</td>
<td>42.52</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>7.1</td>
<td>10.66</td>
<td>75.66</td>
<td>153</td>
</tr>
<tr>
<td>Transit</td>
<td>Bar</td>
<td>1.8</td>
<td>19.54</td>
<td>35.35</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Convenience</td>
<td>10.9</td>
<td>6.91</td>
<td>75.62</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td>3.5</td>
<td>11.52</td>
<td>40.68</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.7</td>
<td>10.15</td>
<td>58.16</td>
<td>102</td>
</tr>
<tr>
<td>Walk</td>
<td>Bar</td>
<td>3.1</td>
<td>22.17</td>
<td>68.42</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Convenience</td>
<td>12.6</td>
<td>6.13</td>
<td>77.34</td>
<td>254</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td>2.6</td>
<td>16.74</td>
<td>43.77</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.9</td>
<td>11.25</td>
<td>66.22</td>
<td>438</td>
</tr>
<tr>
<td>Total</td>
<td>Bar</td>
<td>2.5</td>
<td>21.78</td>
<td>53.59</td>
<td>196</td>
</tr>
<tr>
<td></td>
<td>Convenience</td>
<td>10.9</td>
<td>7.36</td>
<td>80.40</td>
<td>913</td>
</tr>
<tr>
<td></td>
<td>Restaurant</td>
<td>2.4</td>
<td>17.39</td>
<td>41.78</td>
<td>624</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>5.0</td>
<td>12.60</td>
<td>63.46</td>
<td>1,733</td>
</tr>
</tbody>
</table>

**NOTE:** $N = number of respondents.
Bicycle-Supported Development

Transit-oriented development (TOD) has become an accepted term in the transportation vernacular, but bicycle-supported development is a lesser known term. Similar to TOD, bicycle-supported developments are areas with attributes and features conducive to bicycling—such as density of development and mix of uses, abundant and convenient bicycle parking, and proximity to cycling facilities.

Business establishments in these developments have a culture that accepts the bicycle mode, sometimes offering specials for those who arrive by bike, plus amenities such as lockers, showers, and other services that are less obvious from the street. Portland is actively pursuing this development concept, but the individual elements of bike-supported development are catching on nationwide, even when support from the business community is mixed.

Some local businesses embrace bicycling and are recognizing the potential new market share of these consumers. Not all efforts to accommodate this market, however, are met with enthusiasm, and some have encountered organized opposition. For example, Memphis, Tennessee, is adding dedicated bicycle lanes to Madison Avenue as part of a facility redesign and repaving project funded by federal stimulus dollars, but many local merchants have opposed the changes, fearing a loss in their customer base.

Bike Corrals

Bicycle infrastructure can be controversial, particularly when on-street parking for motorists is removed to make way for bicycle lanes or parking. Typically, one or two automobile parking spaces can be converted to on-street parking for 20 to 40 bicycles; these clusters of bicycle racks are termed bike corrals. Businesses sometimes fear that the loss of automobile parking will have a negative effect, making their establishment less accessible to customers who drive and leading to a loss in their customer base that will not be replaced by cyclists. Evidence suggests that these concerns may be unfounded.

Pioneered in Portland, bike corrals have become so popular with local businesses that the city cannot keep up with the requests. More than 75 bike corrals currently have been installed at the request of adjacent business owners who see cyclists as an important customer base. Bars and restaurants have capitalized on this new infrastructure, which provides a buffer from moving traffic, by adding outdoor seating for sidewalk cafes. Because demand is so high, the city must place future corrals strategically and may institute a fee for installation.

This movement is catching on in other parts of the country, with corrals recently installed in such cities as Chicago; Milwaukee, Wisconsin; Los Angeles, California; Cincinnati, Ohio; Baltimore, Maryland; and Salt Lake City, Utah, as well as in Toronto, Ontario, Canada. In the past year, Austin, Texas, has installed seven bike corrals adjacent to bars, live music venues, and coffee shops. The businesses had been trying to accommodate their cycling customer base but the available bicycle parking was insufficient to meet the demand. Somerville, Massachusetts, has added two corrals and plans to install several more.

Built-In Accommodations

In New York City, housing and office buildings are offering more bicycle parking and storage, complementing the new bicycle lanes and parking areas that the city has built in the past several years. Dedicated bicycle rooms in private buildings are on the rise, with amenities ranging from secure indoor bicycle racks to locker rooms. Real estate listings for office spaces and apartments advertise these features.
In 2009, the city endorsed this trend through the Bicycle Access to Office Buildings Law, which guarantees that employees who have bicycle storage or parking facilities inside their workplace cannot be refused building access by security or management. Hostels and hotels in New York increasingly are offering loaner bicycles or repair tools to encourage guests to travel by bicycle.

In response to the strong bicycling culture in Portland, developers have started taking advantage of the marketing possibilities along heavily-traveled bicycle corridors. Bike-supported developments are cropping up in commercial and residential projects, offering amenities and services that appeal to cyclists. For example, a successful urban renewal project along North Williams Avenue, a popular bicycle commuting corridor, has attracted a cluster of new businesses catering to cyclists: restaurants, bars, coffee shops, a guest house, a bicycle-oriented apartment building, and a bike repair and frame-building shop.

This level of bicycle-supported development has not yet become popular beyond Portland. Nonetheless, if cities continue to support bicycling through infrastructure investments, the private sector appears poised to respond to advantage.

**Bike-Sharing Programs**

Bicycle-supported development and the TOD model may come together with the rise of bicycle-sharing programs in cities across the United States. Systems are in place in Minneapolis; Denver, Colorado; New York City; Boston, Massachusetts; Miami Beach, Florida; and Washington, D.C. The placement of bike-share stations at rail stops aims at the traveler’s “last mile,” extending access from transit to destinations.

In Washington, D.C., the program is popular with tourists and residents alike. Bike-sharing stations are strategically placed near Metrorail stops and concentrations of employment, housing, and entertainment. As TODs mature around rail stations, bicycle-supported development may become an important link in their success.

Smaller bike-share programs operate on institutional and workplace campuses, capitalizing on the short trip lengths and connections to retail, shopping, and other local destinations. San Luis Obispo’s bike-share program is designed to facilitate the use of bicycles for workplace trips. The program has provided 15 participating employers with bicycles, helmets, and locks and has conducted safety workshops. Higher education also has embraced the approach, with nearly 90 programs serving students, staff, and faculty at colleges and universities across the country (16).

**Programs and Special Events**

Commercial districts around the country are also experimenting with programs, special events, and services aimed at attracting cyclists or encouraging customers to travel by bicycle. The City of Long Beach, California, has established four bike-friendly business districts under a pilot project funded by the Los Angeles Department of Public Health in 2010 as a part of a larger program to combat obesity, improve nutrition, and increase physical activity. Efforts include providing bicycles for area employees to run errands and conduct business in the area, providing discounts for bicycle patrons on Saturdays, conducting courses on bicycle safety, and offering maintenance and valet parking for bikes during special events, such as street fairs and art festivals. The hope is that the districts will continue the programs after the pilot project ends in 2012.

**Bike Valet Parking**

Bike valet parking is becoming a popular strategy to encourage bicycling to special events. Tucson, Arizona, has offered the service at its semiannual Fourth Avenue Spring and Winter Street Fairs. In Washington, D.C., bicycle valet service was available for the Presidential inauguration in 2009 and for the annual National Cherry Blossom Festival. The San Francisco Bicycle Coalition provides free bike valet service for San Francisco Giants home games and other major public events; city law requires monitored bicycle parking at all events with an anticipated attendance of 2,000 or more.

These bike valet programs are intended to encour-
age attendees to consider bicycling and to reward those who do with free and convenient service. The strategy has focused on special events, however, and has yet to be embraced for everyday shopping and dining trips, although the University of Arizona and the Oregon Health and Sciences University recently began offering free valet parking to cyclists on campus. Business corridors and commercial districts may find the approach worthwhile if bicycle demand increases.

Marketing Efforts
Many businesses are working together to market their goods and services to cyclists. In Vancouver, British Columbia, Canada, Business for Bikes promotes the bike-friendly establishments of its more than 100 members, who receive information on how to market to cyclists and attract new customers who cycle. A recent publication, Bicycling Brings Business: A Guide for Attracting Bicyclists to New York's Canal Communities (17), provides information to businesses along the Erie Canal about accommodating cyclists. Clearly, recognition is growing that cyclists constitute a current or potential consumer market and that certain kinds of infrastructure and services may attract cyclists or encourage business patrons to shift modes.

Tracking the Evolution
With the growth in bicycling investments throughout the United States, the need for more rigorous and detailed evidence on the economic impacts of cycling is pressing. The opportunities are abundant to conduct longitudinal studies that track the evolution of commercial environments before and after the introduction of bicycle infrastructure and services. The profitability and benefits to the private sector should be given more scrutiny, as many advocate for increased public investment in bicycling.

Clearly, the topic is a prime area for more research. More information is needed to document the planning and political processes that make these projects successful, the balance of investments between public and private entities as bicycle-supported developments mature, and the changes—if any—in customer characteristics that occur with mode shifts.

References
Bike Corrals
Local Business Impacts, Benefits, and Attitudes
Portland’s Bicycle Corral Program began with a single location in 2004. The exclusive on-street bicycle parking facility was successful and led to the installation of 40 additional corrals city-wide by 2010. The purpose of this preliminary study was to research and closely examine the perceived benefits and impacts of bike corrals on local businesses proximate to a corral. Prior to this report, only a small amount of anecdotal evidence had been collected regarding business owner attitudes—mostly from businesses that had requested a corral. This study administered a web-based survey to local businesses and conducted a basic land use inventory to gather empirical information. Data were collected on all businesses within one half-block of a bike corral. The results of the survey indicate widespread local business support for the corrals with few exceptions. In addition, the businesses in the sample perceived that bicyclists, on average, account for one-quarter (24.8 percent) of their total customer base. More than two-thirds responded that they have seen the demand for bike parking rise over time, along with the rate of bicyclists as customers. Key findings from this study demonstrate that business owners commonly view the bike corrals as exemplars of sustainable transportation, which enhance the street and neighborhood identity, and increase foot and bike traffic. Using these responses as a guide, it can be determined that businesses recognize that the investment in quality short-term bicycle corral facilities has been an asset for both bicyclists and their commercial establishment.

Top five perceived bike corral benefits:

- **86%** Help to promote sustainability
- **84%** Enhance the street and neighborhood identity
- **77%** Increase transportation options for employees and patrons
- **67%** Increase foot and bike traffic
- **53%** Increase the visibility of businesses from the street

The first Portland Bike Corral installed at Fresh Pot Coffee shop

Source: Alta Planning + Design
Why Bicyclists Are Better Customers Than Drivers for Local Business

Tanya Snyder

- Do local and state officials tune out when you try to talk to them about bicycling? Are they unconvinced by arguments about public health, transportation options, or clean air? Do business leaders send you packing when you suggest building new bike lanes and bike parking, fearing that the loss of car parking will keep customers away?

Then show them the money.

Bikes can mean big business, and businesses are beginning to realize it. At a Bike Summit panel Wednesday on the economic boost cycling can provide cities, speakers highlighted another strong message cyclists can bring to politicians when making their case for investment in bike/ped facilities.

Far and away, the biggest reason business owners resist the addition of bike infrastructure is that they’re afraid it will limit parking. Once they realize they can get 12 bike parking spaces for each car spot, sometimes they begin to change their tune. Even better, they begin to discover that cyclists can be their best customers. “We tend to shop closer to home and shop more often,” said April Economides, a consultant who helped the city of Long Beach, California build bicycle-friendly business districts. Rather than jumping in the minivan and heading to the suburbs to go to the big shopping malls, cyclists patronize the businesses in our neighborhoods.

Long Beach Mayor Bob Foster understands the value of bikes: “I see parts of the city on my bike that I would never even notice if I was just driving,” he said. “It’s a way for me personally to get closer to the city.”

That closeness has a dollars-and-cents value. Cyclists travel at what Portland Bike Coordinator Roger Geller calls a “human-scale speed” that allows them to “stop and buy something.” Besides, Economides said, if you’re car-free you’ve got an extra $6,000 jangling around in your pocket that you otherwise would have spent on gas and car maintenance (actually, $8,776 if you believe AAA). According to researchers with Intelligent Communities, a program of the National Building Museum, only 16 percent of household car expenses stay within the local economy.
The four bicycle-friendly business districts Economides helped develop in Long Beach provide a model of how to encourage cycling without adding infrastructure. Local businesses see bike access as a boon for local shopping and dining. They have an informal merchant bike-share program, so the business owners themselves can enjoy the benefits of biking around town. The program created the nation’s largest citywide bike discount program, where customers get better prices if they arrive by bike. The program also brought the districts community bike rides, free bike repairs, bike valets at local events, and even free bike portraits, where you can get your picture taken with your bike (see left). The programs have brought a flood of new customers into participating stores.

Two of the four districts didn’t even have a lot of good bike infrastructure to begin with – but there’s more demand for it now, even from businesses that used to be bike-averse.

Long Beach got a stimulus grant to create the districts, and the term of the grant expired just last week. But Economides said participating merchants are now so jazzed about cycling that they’ll carry on the work. And it’s a diverse group of businesses: Organizers reached out to Spanish- and Khmer-speaking merchants in the area and got their full participation. They also left paper flyers and postcards on people’s doorsteps, since not everyone is wired.

“Open Streets,” or ciclovias – events where streets are closed to motorized traffic and become the domain of bicyclists, pedestrians, skateboarders, rollerbladers, jugglers, dog-walkers – are another way to bring money to local businesses. Washington University in St. Louis was able to quantify the economic benefit of Open Streets programs: 73 percent of Open Streets participants spent money at a restaurant or store on the route, and 68 percent became aware of a restaurant or store that was new to them.

Business Improvement Districts are another good place to seek support for pro-bike policies, said Andy Hanshaw of the San Diego County Bicycle Coalition. Local shopping and dining is what they’re all about, and they might be happy to sponsor community bike rides and new bike parking.

After all, in downtowns turning car lanes over to people can be a great moneymaker. Its most stunning success, perhaps, has been Times Square, “the ultimate end vision of how to pedestrianize the most pedestrian-heavy place in America,” according to Mike Lydon of the Street Plans Collaborative. According to a recent study commissioned by the local BID, Times Square helps generate more than one-tenth of the city’s economic activity—on less than one percent of its land.

From park(ing) day, where people create ephemeral parks in parallel parking spaces, to parklets that make those tiny parks more permanent, to pop-up cafés, adding outdoor public space draws people and adds life to the street. Those spaces also often become de facto additional seating for nearby establishments, giving them more capacity for free.

“Bicycling, just like walking, helps make a Main Street more vibrant,” said Economides. “It adds more eyes and ears to the street, so it makes it safer. So think about a mom pushing a stroller. She’s going to want to walk down a block that has more people walking and bicycling; she’ll feel safer. And you do want to attract women and moms. We’re a pretty important shopping base.”

Rory Robinson of the National Park Service found many other examples of bicycling spurring economic revitalization, like the opening of the Mineral Belt Trail in Leadville, Colorado, which led to a 19 percent increase in sales tax revenues, helping the city recover from a mine closure in 1999. The 45-mile long Washington & Old Dominion Trail in
the D.C. suburbs brings an estimated $7 million into the northern Virginia economy, nearly a quarter of that from out-of-towners. And downtown Dunedin, Florida was suffering a 35 percent storefront vacancy rate until an abandoned CSX railroad track became the Pinellas Trail. Storefront occupancy is now 100 percent, Robinson found. “Business is booming.”

And the economic benefit of bicycling for communities doesn’t end with cyclists’ expensive cappuccinos and impulse buys. Properties near bike paths increase in value 11 percent, said Economides. Realtors and homebuilders consistently find that access and proximity to walking and biking facilities, especially greenways, makes homes easier to sell. A reporter for the Indianapolis Star said it best in 2003: “It may not have sand and crashing waves, but the Monon Trail is the equivalent of beachfront property in the Indianapolis area.”

Add to that the fact that bike lane construction creates about twice as many jobs as road-building for the same amount of money, and you’ve got yourself a great economic argument to take to local leaders and politicians when you ask them to support walking and biking – even (or especially) in tough economic times.
I always enjoy finding surprises (the good kind) when I’m out riding.

Last week, my wife and I decided to ride over to Rocco’s Little Chicago on Broadway for dinner. Our surprise came when we arrived and the bike racks were completely full. That may not be so unusual for many restaurants outside of the UA/Downtown core that have only one rack (if any), but Rocco’s is really bike-friendly with space for 14 bikes - we ultimately locked up to the gas meter.

Turns out it was “Wings Wednesday” and most everyone in the place was chowing on piles of those meaty morsels – who knew cyclist liked wings so much?

I caught up later with the owner, Rocco DiGrazia, and asked about all the bikes– was it really the wings that brought them all in? He said that Wednesday is his peak bike day,
but about half of his staff regularly rides to work and many customers from the adjacent neighborhoods ride in as well.

I typically think of places on University, 4th Avenue, or downtown as prime locations for bike corrals, but it’s seems there may be some bike hot spots beyond these areas that already attract enough bike traffic to warrant corrals.

Where have you been surprised to see overflowing bike racks?
How Flexible Parking Requirements Spur Economic Development: Lessons from Santa Monica

Carter Rubin

Editor’s Note:
Streetsblog Los Angeles founding board member Carter Rubin recently finished his Master of Urban and Regional Planning degree at UCLA. In the following article, he recaps the findings from his capstone “client project” for the Urban Design Studio at the L.A. Department of City Planning. His research adviser was the inimitable parking guru, UCLA Urban Planning Professor Donald Shoup. You can read the report in its entirety here.

It’s hard to imagine today, but Santa Monica’s commercial areas – now home to Silicon Beach, tourism and bustling retail – were sleepy, underperforming and shabby just a few decades ago. In an effort to revive its commercial heart in particular, the city approved millions in funding for municipal parking structures in the heart of downtown. These garages still stand today on streets parallel to the Third Street Promenade.

City leaders hoped that this would create a convenient means for potential patrons to reach the Promenade, allowing them to park once and do all their subsequent shopping, dining and recreating on foot, thus keeping the streets clear of excessive car trips. More easy parking seemed like the obvious fix, but those garages alone weren’t enough to generate the commercial transformation Santa Monica sought.

What Santa Monica needed – and eventually got – was a different kind of parking change. The critical policy was to create a by-right process allowing developers to build, and businesses to operate, with less on-site parking. It was a dramatic break from what is typical of virtually every city in America: require every business to provide abundant on-site parking, free of charge to all its patrons, regardless of whether or not the business deems it necessary.

This new policy would ultimately allow small-scale developers and entrepreneurs to find and implement the most successful uses for those properties without having to worry about whether meeting the expensive minimum parking requirements was practical or cost-effective.

That was the change that would ultimately lead to a vibrant commercial district generating significantly more revenue for schools, libraries, transit and other municipal services.

Santa Monica’s Parking Innovation

In 1986 the Santa Monica City Council approved a business assessment district to fund improvements for the
Promenade area. Part of that program included this critical piece: it gave developers the ability to opt out of providing the required on-site parking by paying an annual fee of $1.50 per square foot of floor area added for which there was no parking provided. (In other words, if you provided all the typically-required parking, you paid no fee.)

Further, it allowed changes in a given building’s land use – say, from a nail salon to a restaurant – without triggering the typical increase in parking requirement from one parking space per 300 square feet to one per 75 square feet. If that business is in an older building that takes up most of the parcel, there’s usually no feasible to adaptively reuse that building as a restaurant – or any other business that has a higher parking requirement than whatever occupies the space presently.

Indeed, much of downtown Santa Monica’s building stock predates parking requirements. So many of its charming and historic buildings take up all or nearly all of the parcel. No room to add parking! If the law requires you to add parking to change a land use to a more productive use, and there’s nowhere to add parking, you either have to tear down the building and build strip style parking or underground parking. And the latter is often infeasible for financial and geometric reasons.

So what we saw in downtown Santa Monica pre-1986 is what we see across many commercial districts with small plots of land: storefronts filled with business just eking it out, not because no one would invest there, but because parking requirements make it essential impossible to invest there without getting a costly and politically perilous variance.

Downtown Santa Monica today, as we know, has thriving pedestrian-friendly retail streets filled with successful restaurants and shops. The question that I wanted to answer in my capstone project was: To what extent was 1986’s flexible parking option responsible?

**How We Measured the Impact of Parking Requirements**

To determine the impact of the making parking requirements more flexible in downtown Santa Monica, I evaluated what was happening along one of the boundaries of the parking district, where on one side you had the flexible parking program and on the other side you had the standard parking requirements still in place.

It turned out that Wilshire Boulevard, that iconic Southland street, was one of those boundary lines. The north side of Wilshire between 2nd Street and 4th Court was a commercial stretch with the standard parking requirements, and the south side was likewise zoned for commercial uses, but with the flexible parking requirements. Thus, comparing the two sides should reveal the impact of the parking requirements.

To compare the two sides, I measured a series of variables relating to city finances, parking and urban form. The findings were dramatic.

**What We Found**

The properties in the flexible parking requirement area generated eight times more sales tax revenue per parcel square foot than the...
properties in the standard parking requirement area. Not only that, the businesses on those parcels generated all that sales tax revenue with a fraction of the onsite parking. Parcels in the flexible requirement area had an average of 4.4 spaces per parcel, while the parcels in the standard-requirement side averaged over a hundred spaces per parcel.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard-Requirement Side</th>
<th>Flexible-Requirement Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Restaurants</td>
<td>1 (Small café)</td>
<td>6</td>
</tr>
<tr>
<td>Total Santa Monica Sales Tax Revenue Per Year</td>
<td>$97,245</td>
<td>$447,305</td>
</tr>
<tr>
<td>(2011-12 Two-Year Average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Tax Revenue Per Square Foot of Building</td>
<td>$0.22</td>
<td>$2.19</td>
</tr>
<tr>
<td>Area (2011-12 Two-Year Average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Tax Revenue Per Square Foot of Parcel</td>
<td>$0.52</td>
<td>$3.98</td>
</tr>
<tr>
<td>Area (2011-12 Two-Year Average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Tax Revenue Per Front Foot (2011-12</td>
<td>$47</td>
<td>$298</td>
</tr>
<tr>
<td>Two-Year Average)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All that extra parking space meant that an estimated 340,000 square feet of prime Santa Monica real estate – blocks from the palm tree-lined bluffs – was dedicated to meeting standard parking requirements. That total represents about 75% of the square footage of the actual leasable space in those buildings.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standard-Requirement Side</th>
<th>Flexible-Requirement Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count of Parcels with On-Site Parking</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Average Parking Spaces Per Parcel</td>
<td>126</td>
<td>4.4</td>
</tr>
<tr>
<td>Median Parking Spaces Per Parcel</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Spaces Per 1,000 Square Feet of Building Area</td>
<td>2.5</td>
<td>0.25</td>
</tr>
<tr>
<td>Estimated Square Feet of Parking Area (300</td>
<td>339,300</td>
<td>15,900</td>
</tr>
<tr>
<td>Square Feet/Space)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Square Feet of Parking Area As a %</td>
<td>75.5%</td>
<td>7.8%</td>
</tr>
<tr>
<td>of Square Foot of Building Area (300 Sq Ft/Space)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Sidewalk Driveway Ramp Curb Cuts</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sidewalks</td>
<td>270</td>
<td>30</td>
</tr>
<tr>
<td>Linear Feet of Automobile Facilities Along Sidewalks</td>
<td>640</td>
<td>1,200</td>
</tr>
<tr>
<td>Percent of Frontage that is Retail, Restaurants and Shops</td>
<td>31%</td>
<td>80%</td>
</tr>
</tbody>
</table>

But the impact of parking requirements isn’t limited to just city finances and floor area. It affects the built environment and the street-level pedestrian experience – especially important in an important commercial district.

So I measured the amount of linear street front that was filled with by ground-floor shops and how much was taken up by parking infrastructure like surface parking lots, driveways and garages. On the flexible-requirement side, 80% of the street front was taken up retail, restaurants and shops – all those things that make a shopping district interesting to walk around. In contrast, the standard-requirements side had only 30% of its linear street frontage dedicated to retail. Contributing to this stark difference is the fact that the standard-requirement side had ten times more street front dedicated to parking infrastructure than the flexible-requirement side.

Particularly revealing was the fact that there were six restaurants on the flexible-requirement side versus only one – a small café that was about the change locations – on the standard parking side. Why does that matter? Restaurants typically have among the highest parking requirements because of their high customer turnover, so they serve as a good “indicator species” for whether a higher parking requirement is precluding certain business. In Santa Monica’s case, an array of successful restaurants in the flexible-requirement study area – i.e. T’s Thai, California Pizza Kitchen, P.F. Chang’s and Hillstone – also generate a lot of sales tax revenue and employ a lot of people.

Conclusions, Implications and Recommendations for the City of Los Angeles

So, one side of Wilshire Boulevard has lots of thriving businesses, less on-site parking and a more pleasant pedestrian environment. The other side has fewer businesses and more parking, including surfacing parking lots two blocks from
the Ocean. It's easy to imagine that an entrepreneur could find a more valuable use of that land if they had the flexibility to develop that lot, which they currently do not.

Since the City of L.A. was the client for my “client project,” I wanted to be able to answer the question: What can L.A. learn from this? What neighborhoods would benefit from a more flexible parking requirements?

An obvious candidate for this type of intervention would be Westwood Village, a similarly once-thriving commercial district with older building stock where onerous parking requirements help keep storefronts vacant today.

Additionally, many of Los Angeles’ commercial boulevards are lined with older, pedestrian friendly storefronts. As Mott Smith showed, these buildings cannot be re-purposed without providing the now-required parking or seeking a costly, risky variance; providing that parking in a cost-effective manner often means turning older, pedestrian-friendly shops into strip mall or drive-through Taco Bell type establishments.

Los Angeles could implement an ordinance that allows the adaptive reuse of existing buildings — without having to meet outdated parking requirements — on boulevard commercial stretches. This could be modeled after the adaptive reuse ordinance that has helped transform downtown L.A. into a more livable, prosperous community. After all, almost of all of Los Angeles’s great commercial boulevards – Wilshire, Van Nuys, Pico, Vermont, Crenshaw, etc. – are served by frequent bus or rail service and are surrounded by fairly dense walkable neighborhoods.

These are exactly the areas where we don’t need to require every business to operate as if every patron will drive alone in a car. On the contrary, we should be encouraging trips by foot, bike and transit in these neighborhoods. In fact, our decades-old parking requirements have encouraged driving and traffic, and they have degraded the pedestrian environment.

With a new Mayoral administration in place and a comprehensive zoning code rewrite in the works, now is the perfect time to make Los Angeles’s parking requirements more flexible, so we can build the livable, walkable and prosperous communities L.A. deserves.