Food Truck Consulting Study of Proposed Food Truck Regulations

Introduction

The City of San Diego is considering revisions to its mobile vending ordinance. The revised ordinance would, in part, 1) prevent food trucks from operating in the Gaslamp District (157.0304); 2) set hours of operation for food trucks that wish to operate within 500 feet of a dwelling unit (141.0612(a)(11)); and 3) require commercial and residential property owners who wish to host food trucks to first acquire a mobile food permit from the city (123.0602). The stated purpose of these revisions is to address certain health-and-safety issues, including ambient noise near residences and sidewalk congestion in certain high-profile commercial zones.

In order to determine if the proposed food-truck regulations identified above will further these public-safety concerns, SDSU students/residents of San Diego Zachary Isaac Clark, Bennet Smith, Jordan Zimmer, Everett Wolf, Jose Moreno-Pinete, and Nathalie Goudy conducted the following study. Thanks go to Professor Semm, whose social problems 102 class inspired this report.

Questions To Be Answered

1. Do food trucks parked on the street in the Gaslamp District of downtown San Diego create or exacerbate pedestrian sidewalk congestion?

2. To what degree does a food truck increase the ambient noise level when operating between the hours of 11 PM to 2 AM and how far does that noise travel with relation to the surrounding areas?

3. Approximately how many private property owners would be required to obtain a mobile food permit for food trucks operating on their properties and what burden will that place on City officials?

Summary of Findings

1. Our research revealed that the presence of a food truck on Fifth Avenue cannot be singled out as a hazard for pedestrians in the Gaslamp District of downtown San Diego. The time it took for a pedestrian to travel one block was unaffected by the presence of a food truck.

2. The presence of a food truck increased ambient noise levels by only approximately six percent, with the decibel level falling to below baseline levels at a distance of only 25 feet.

3. Requiring private property owners to acquire a permit in order to allow a food truck to operate from their property could cause the City of San Diego to have to process up to 2,350 additional permits each calendar year. This would require an estimated 9,400 hours of time for San Diego employees, which is the equivalent of having five full-time employees work on issuing such permits exclusively.

Methodology and Analysis

Question #1: Do food trucks parked on the street in the Gaslamp District of downtown San Diego create or exacerbate pedestrian sidewalk congestion?

Methodology:

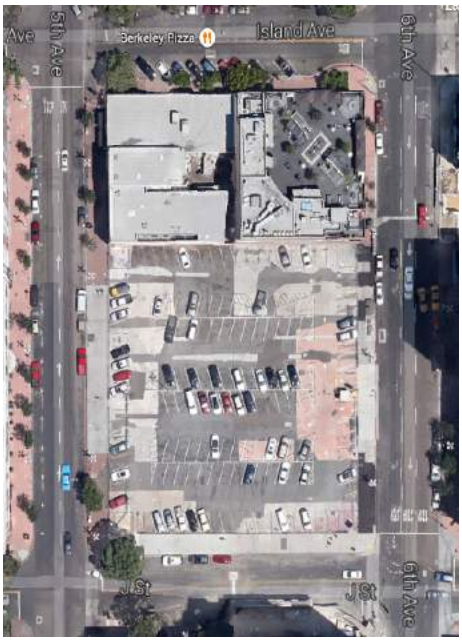
To determine if food trucks create or exacerbate sidewalk congestion within the Gaslamp District of San Diego and other vicinities, which is the basis for Section 157.0304's requirement that food trucks not operate at those locations, we directly observed pedestrian behavior and travel times in the District both with and without the presence of a food truck. Our focus was specifically on and around Fifth Avenue between J Street and Island Avenue. This is where the food truck, *Crepes Bonaparte,* is usually stationed. Our observations occurred between the hours of 6 pm and 8 pm on Friday, February 21, 2014 and Saturday, February 22, 2014. We chose those dates and times to ensure a relatively consistent level of pedestrian volume, so that the data was not too heavily influenced by any increase in foot traffic that might occur at other times on Fridays and Saturdays.

The first night of our study was a control test that looked at pedestrian behavior when no food truck was open for business on Fifth Avenue. We counted the number of pedestrians walking along both the West and East sides of Fifth Avenue (the street where the truck parks) and on the West side of Sixth Avenue (the next street to the east or "behind" the truck's operation). The purpose of these observations was to learn how many people on a given weekend evening pass by on the streets that are said to suffer the greatest degree of pedestrian congestion due to the presence of a food truck.

Along with counting the number of pedestrians, we also recorded the amount of time certain randomly selected individuals took to complete the distance from one side of the block to the other.[1] We did this to learn how long it took the average person to travel the length of the block when a food truck was not present.

On Saturday night, we ran the same test once again, with the only difference being the presence of *Crepes Bonaparte*, which was open for business on Fifth Avenue. The methodology was identical to that used in the control test to allow for an apples-to-apples comparison.

[1] Excluded from those observations were individuals who did not complete traversing the block (for example, those who stopped to window shop), as well as individuals who were running or riding bicycles.



Area of study: 5th Ave between J St and Island Ave
(Image from Google Maps)

Results:

Part 1 - Flow of Pedestrians

		Total Pedestrians 6PM - 8PM			Ave Travel Time		
		Friday - No Truck	Saturday	% Variance	Friday - No Truck	Saturday	% Variance
5th St btw J St & Island St.	**Truck Side**	1565	1747	10%	1:19	1:19	0%
	Non - Truck Side	1319	1676	21%	1:24	1:28	5%
6th St btw J St & Island St.	**No truck present**	294	475	38%	1:11	1:08	-4%

Results based on field test conducted on Fri February 21 & Saturday February 22 (Counting Pedestrians using queue counter, timing pedestrians crossing the block)

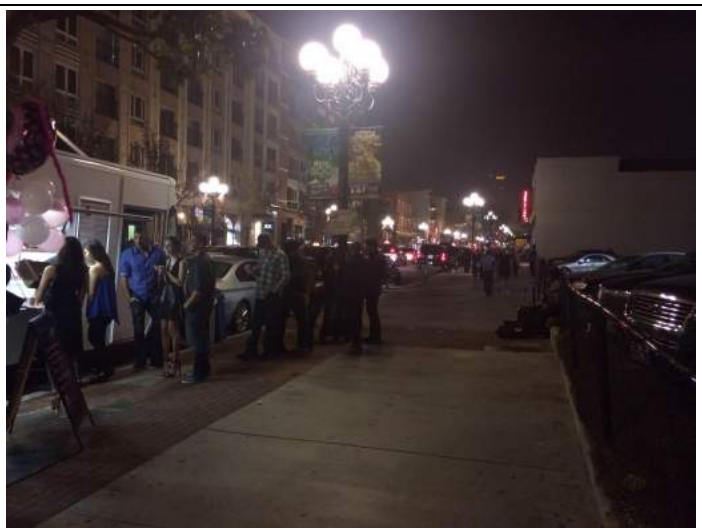
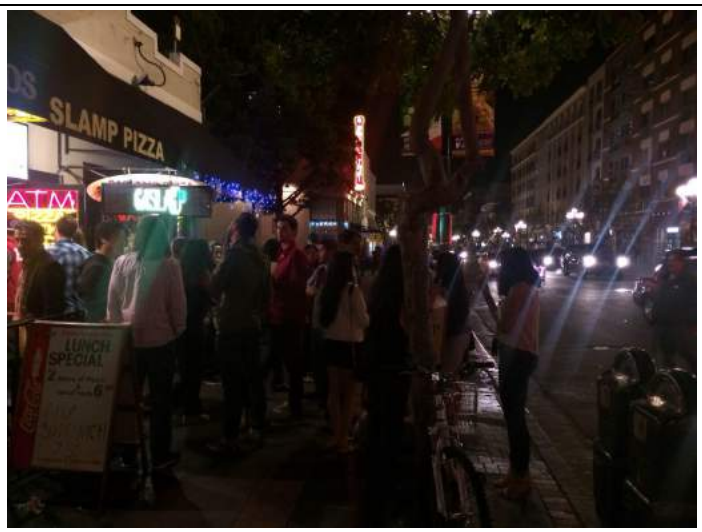
*Data collected by three teams of two observers each, who counted and timed pedestrians within the bounds of their given sidewalk.

Conclusion:

As one can see from the data collected, the presence of a food truck on Fifth Avenue does not create or exacerbate sidewalk congestion by pedestrians in the Gaslamp District of Downtown San Diego. Although the amount of pedestrian traffic increased ***10%*** between Friday to Saturday night, the amount of time it took a pedestrian to traverse that side of the block did not increase whatsoever.

without a food truckwe observed of ***5%*** pedestrian travel s, which can be attributed an increase in overall pedestrian traffic pedestrian travel , despite the fact that the during those same observation periods.

Continued data: Gaslamp District late night

	
The food truck, *Crepes Bonaparte,* experiencing a busy night in the Gaslamp District on Saturday, February 22. The line of 15 to 20 people, when organized, provides enough clearance to comply with San Diego's existing public safety regulations. Based on the position of the truck at this stop, the pedestrians are also separated from oncoming traffic.	The restaurant, *Gaslamp Pizza,* just one block up from the *Crepes Bonaparte* food truck, also experienced a busy night on Saturday, February 22. As one can see, restaurant patrons are clustered about, unable to make a line so as to allow for the clearance that existing regulations require. To get around, pedestrians must force their way through the crowd or step into the street.

Question #2: To what degree does a food truck increase the ambient noise level when operating between the hours of 11 PM to 2 AM and how far does that noise travel with relation to the surrounding areas?

Methodology:

To compare the level of ambient noise in an area, we used a decibel reader to record the sound level at two separate locations in the Gaslamp District. For each night, we measured the sound level at each location three different times. Our goal was to determine 1) the extent to which a food truck may increase the amount of ambient noise in an area, and 2) the distance from the food truck at which the ambient noise level returns to baseline.

Results:

Part 2 - Late Night Ambient Noise

		Friday - No Truck Present				Saturday - Truck Present				
		12 AM	1AM	2AM	Average	12 AM	1 AM	2 AM	Average	% Variance
5th St btw J St & Island St.	**Truck Side**	73	73	80	75.33	78	80	82	80.00	6%
	25 Ft from Truck	NA	NA	NA	NA	73	74	74	73.67	NA
	Non - Truck Side	73	76	74	74.33	70	72	74	72.00	-3%
6th St btw J St & Island St.	**No truck present**	67	68	71	68.67	67	69	73	69.67	1%

Results based on field test conducted on Fri February 21 & Saturday February 22 (measured average volume by decible reader)

* data collected every hour from the hours of 12 AM to 2 AM on both Friday and Saturday.

Conclusion:

The data revealed that a food truck increases the ambient noise level by approximately ***6%*** (with the average for Saturday night being 80 dB, as opposed to 75.33 dB on Friday night when no food truck is present). Any additional ambient noise associated with a food truck's presence, however, dissipated only a short distance away from the truck. On Saturday night, we recorded a decibel level of 73.67 when standing only 25 feet from the truck. This is lower than the average level of ambient noise that we measured when no food truck was present (75.33 dB).

Question #3: Approximately how many private property owners would be required to obtain a mobile food permit for food trucks operating on their properties and what burden will that place on City officials?

Methodology:

To figure out how many private property owners would have to obtain a mobile food permit under the proposed regulation to allow food trucks to operate on their property (123.0602), we first had to determine both the number of trucks operating in San Diego and how many locations they stop at that would require a mobile food permit. “”how many food trucks operate how many stops each truck on average makesWe also interviewed Denny Moody, owner of Moody’s Catering, to learn how many stops a route truck will make on average, as well as how many of those stops would require the private property owner hosting the truck to acquire the proposed mobile food permit. With this information in hand, we multiplied the average number of stops employed by a typical gourmet food truck, route truck, or stationary truck that would require a mobile food permit by the total number of food trucks in each category.

Results:

Part 3 - Mobile Food Permit #'s

Type of Truck	Est #	Locations	Total		
Gourmet Trucks	50	39	1950	Total Permits Needed	2350
Route Trucks	100	3	300	Hours required (4hrs)	9400
Stationary Trucks	100	1	100	Weeks required (40hrs/wk)	235
		Total	2350	Staff Required (50 weeks per year)	5

Number of each truck type based off "Consulting Report on Economic Impact Analysis and Marketing Research Project for The United Association of Food Trucks of San Diego" Aug 15, 2013 pg.19
Location Numbers for Stationary truck type based off "Consulting Report on Economic Impact Analysis and Marketing Research Project for The United Association of Food Trucks of San Diego" Aug 15, 2013 pg.19
Location Numbers for Route trucks type based off interview with Denny Moody owner of Moody's Catering Sun. Feb 22
Location numbers for Gourmet Truck type based on results of Survey sent to 50 gourmet food truck operators, 15 responses (25% of Gourmet Food Trucks)
Hours required for permit approval based on max pemit review as cited by City of San Diego planning division in Smart Growth & Land Use Committee Meeting on February 12, 2014

Conclusion:

Our calculations show that private property owners would have to acquire approximately 2,350 permits in order for the food trucks to operate at the locations they currently frequent. Estimating that City employees would have to spend on average four hours to process a typical permit application and regulate the truck, these permits would take up 9,400 hours of time by City officials. Put another way, the mobile permit requirement, if implemented, would take up the time of five full-time City employees.