

# **Food Truck Consulting Study of Proposed Food Truck Regulations**

The following study was conducted by Zachary Isaac Clark, Bennet Smith, Jordan Zimmer, Everett Wolf, Jose Moreno-Pinete, and Nathalie Goudy, SDSU students/residents of San Diego, and was inspired by Professor Semm's social problems 102 class to see to what degree the following proposed food truck regulations will affect the City of San Diego, the Food Truck Industry, and their relation to public safety concerns.

- **Ban on food truck operating on private property and the on the street in Gaslamp (157.0304)**
  
- **Limit on hours of operation for food trucks when within 500 ft of any dwelling unit (141.0612.A.11)**
  
- **Commercial & Residential property owners looking to host food trucks must obtain a Mobile Food Permit. (123.0602)**

## **Questions to be answered**

1. Is there a public safety concern for pedestrians when a food truck is parked on the street in the Gaslamp Quarter of Downtown San Diego?
  
2. To what degree does a food truck increase the ambient noise level when operating between the hours of 11 PM - 2 AM and how far does the noise travel with relation to the surrounding areas?
  
3. Approximately how many locations will be required to obtain a mobile food permit for food trucks operating on their property?

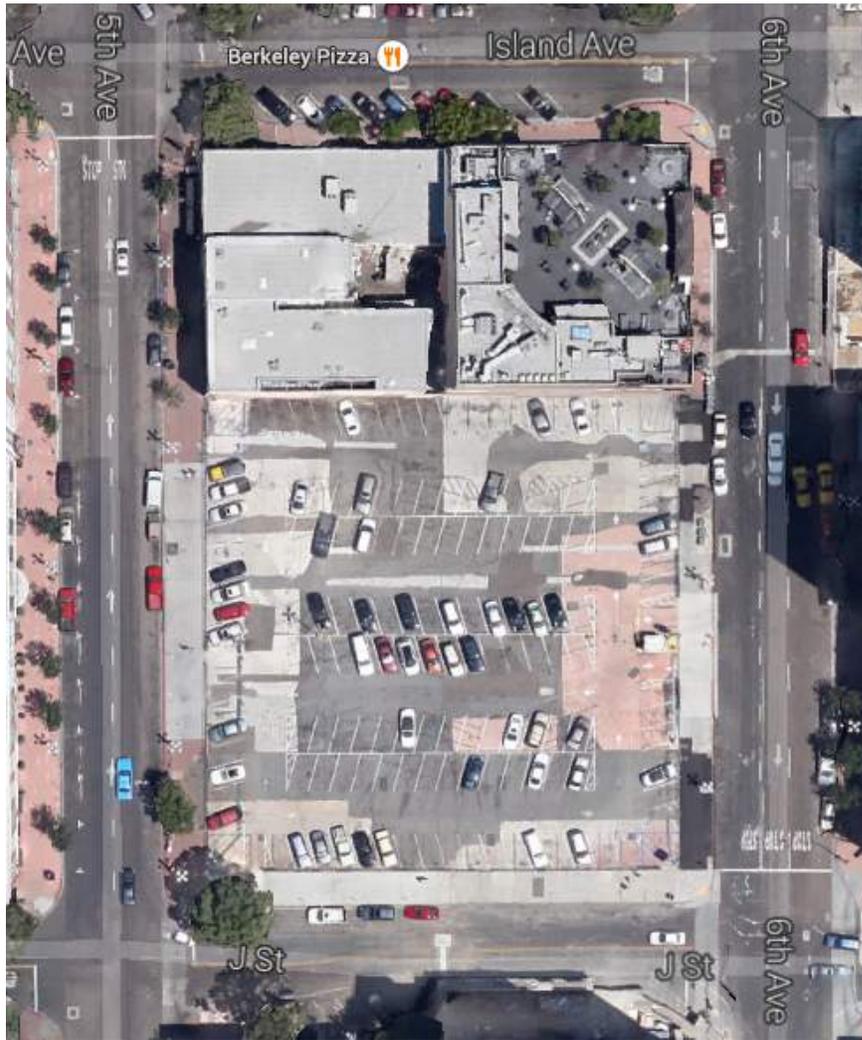
**1. Is there a public safety concern for pedestrians when a food truck is parked on the street in the Gaslamp Quarter of Downtown San Diego?**

**Process:**

To test to see if there is a legitimate correlation between food trucks and the claim stated in the above proposed regulations (157.0304) that they are a hazard to those within the Gaslamp District of San Diego and other vicinities, we conducted a simple yet concise study on pedestrians within the Gaslamp District specifically on and around Fifth Avenue between J Street and Island Avenue where the food truck, *Crepes Bonaparte*, is usually stationed. Our survey was conducted in the span of two days between the hours of 6 pm and 8 pm on Friday February 21, 2014 and Saturday February 22, 2014. The study was conducted between the hours of 6 pm and 8 pm to insure that the data was not too heavily influenced by the increase in foot traffic from Friday to Saturday, which is a variable that we could not control. However, this external variable was accounted for by picking a time that, on average, is similar in the volume of pedestrians.

The first night was a control test meaning the truck was not open for business on Fifth Avenue, hence could not be considered as a possible infringement on the pedestrians and their overall safety. Our goal was to count the number of pedestrians on 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). We did this to get an idea of how many people on a given night pass by on the streets that are said to be affected by the presence of a food truck.

Along with counting the number of pedestrians, we also randomly recorded the amount of time various individuals took to complete the distance from one side of the block to the other, excluding those who stopped for an unusually amount of time (window shoppers), runners, bikers, etc. to keep the data consistent. We did this to get an estimate on the amount of time it took the average person to travel from one side of the block to the other without the presence of a food truck. The second night we ran the test with the food truck open for business on Fifth Avenue. We repeated the same procedure as the control test and collected the data for comparison.



Area of study. 5th Ave between J St and Island Ave

<https://www.google.com/maps/place/5th+Ave+%26+J+St/@32.7093791,-117.1599855,261m/data=!3m1!1e3!4m2!3m1!1s0x80d9535a2232d763:0x263517e530b47377>

**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 collect by three teams of two each responsible for counting and timing 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 cannot be singled out as a hazard for pedestrians in the Gaslamp Quarter of downtown San Diego. The data shows that there was on average a **23%** increase in foot traffic from Friday to Saturday between the three sidewalks observed in the study accompanied by a **.33%** increase in the amount of time it took for a pedestrian to walk the length of the block. This correlation shows that even with the increase in the amount of people on the streets and the addition of the food truck, the time it took to get from one side of the block to the other was almost unaffected. In fact, the sidewalk directly adjacent to the truck experienced an increase of **0%** from the time trials without the presence of the truck to the trials with the truck on the busier night. On the other side of Fifth Avenue, there was a slight increase in the time that we contributed to the presence of retail stores. One can conclude with an addition of 300+ pedestrians possibly perusing the stores than the night before, the time it takes to travel the distance of the block can be related to the enticement of the stores rather than the presence of a food truck on the other side of the street. Lastly, on Sixth Avenue, the average time between the two days dropped by **4%** from Friday to Saturday. The amount of people on Sixth Street increased by **38%** thus revealing that even one block away from where a food truck is stationed, the truck has no immediate or hazardous effect even with an increase in foot traffic.

### Continued data: Gaslamp late night



The food truck, *Crepes Bonaparte*, experiencing a busy night in Gaslamp Saturday, February 22. The line of 15-20 people, when organized, allows for a large enough clearance following public safety regulations already set in place in San Diego. Based on the position of the truck at this stop, the pedestrians are also separated from oncoming traffic.



*Gaslamp Pizza*, just a block up the street from the study, experiencing a busy night at the same time as the food truck on Saturday, February 22. As one can see, an unclear amount of pedestrians are unable to make a line to allow for the regulated clearance needed by regulations already implemented. To get around, pedestrians have to force their way through or walk around stepping off the provided sidewalk into the street where it is clearly seen to be hazardous with the given amount of headlights brightening this picture.

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

**Process:**

To obtain the average noise level for each reading, we used a decibel reader at each street location at three different times during the night for both nights. In doing this, we hoped to prove that though a food truck may in fact increase the amount of noise in a given area, they are not above the average noise level 500 feet away, thus not heard or considered in violation of proposed regulation (141.0612.A.11).

**Results:**

<b>Part 2 - Late Night Ambient Noise</b>										
		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:**

As depicted in the data, on a busier night the truck generates a noise increase of **6%**. The average for a busy night is 80 db as opposed to 75.33 db with no truck present. So, to be considered in violation of the proposed noise regulation of 500 feet, the truck must generate more than 75.33 db at any distance between 500 feet. However, when tested on a busy night at only 25 feet from the truck, the noise level was at 73.67 db which is less than the average 75.33 db of Fifth Avenue when no truck is present. That being said, a 500 foot radius is proven to be too extreme as a cutoff point and a more realistic and reasonable distance should be set between 25 and 50 feet depending on the location. This is supported even further by the fact that Sixth Avenue, which has one fourth the amount of foot traffic, is on average between 68.67-69.67 db, only around 6 db below the average for Fifth Avenue.

**3. Approximately how many locations will be required to obtain a mobile food permit for food trucks operating on their property?**

**Process:**

To figure out how many locations will be required to obtain a mobile food permit under the proposed regulation (123.0602) we first had to get the number of trucks operating in San Diego and the locations they stop at that would require the mobile food license. To prevent the repetition of stops, we only counted locations specific to one truck. We used the "*Consulting Report on Economic Impact Analysis and Marketing Research Project for The United Association of Food Trucks of San Diego*" to pull our data regarding the number of different trucks in San Diego and the average of their stops. We also had a phone interview with Denny Moody, owner of Moody's Catering, to acquire the average amount of stops for a route truck and the amount of their stops that would require them to have the proposed mobile food license. We multiplied the number of stops by the number of trucks to acquire a total amount of permits per group of trucks that will be needed to regulate. From there, we took the total amount of permits (2,350), and multiplied them by the amount of hours required to process and regulate them. Then, we divided by the average forty hour work week and found that to properly regulate this proposed regulation, it would require five full time workers working forty hours each week for fifty weeks out of the year.

**Results:**

<b>Part 3 - Mobile Food Permit #'s</b>						
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	
		<b>Total</b>	<b>2350</b>	<b>Staff Required (50 weeks per year)</b>	<b>5</b>	

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 permit review as cited by City of San Diego planning division in Smart Growth & Land Use Committee Meeting on February 12, 2014

## **Conclusion:**

In conclusion, this proposed legislation is merely wishful thinking. It is not cost efficient for either party to implement this legislation. The city will have to hire at least five people but based on the numbers, it is apparent more people will be needed to regulate the permits. This means more cost for no guarantee of implementation. Food trucks will operate with or without the permits and locations will continue to do businesses with them like they do today. With so many locations requiring a mobile food permit, the city employees responsible for regulating these stops will be overworked and overwhelmed with requests. These stops are a major source of a food truck's business and one can say that the holds and wait times related to the mobile food permit will always be at an elevated level. this would cause a standstill in not only the food trucks' business and livelihood but also in the local government of San Diego.