

**CRIME-RELATED SECONDARY EFFECTS OF  
SEXUALLY-ORIENTED BUSINESSES**

**REPORT TO THE COUNTY ATTORNEY  
PALM BEACH COUNTY, FLORIDA**

***EXECUTIVE SUMMARY***

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The Palm Beach County Attorney has retained us to formulate and express opinions on the crime-related secondary effects questions raised in *Palm Beach County v. Casablanca East*. Based on our expertise in the areas of criminology, law, and statistics and on our prior research, we have three general opinions:

- The criminological theory of secondary effects predicts that sexually-oriented businesses (SOBs) will have large, significant crime-related secondary effects. This occurs because SOBs draw customers from wide catchment areas. Because these customers are disproportionately male, open to vice overtures, and reluctant to report victimization to the police, offenders see them as “soft” targets. The high density of “soft” targets near SOBs attracts offenders of two types: vice purveyors who dabble in crime and criminals who promise vice in order to lure or lull potential victims.
- Crime-related secondary effect studies, using a range of designs and variables, demonstrate that SOBs have large crime-related secondary effects.
- In light of the strong theoretical expectation and extensive empirical corroboration, it is a *scientific fact* that SOBs pose ambient crime risks.

In addition to the three general opinions, we have several opinions specific to the County and to this lawsuit.

Plaintiff’s expert, Dr. Randy D. Fisher, has argued that the County has relied on methodologically flawed evidence; and that more rigorous studies, conducted by Dr. Fisher and his colleagues, find no secondary effects. We disagree with Dr. Fisher.

- Dr. Fisher’s methodological rules have been rejected by the social science community and by the courts. Judged by conventional methodological rules, the factual predicate of the County’s ordinances is sufficient.
- Dr. Fisher’s studies are *not* more rigorous than the studies relied on by the County. *Nor* do the results of his studies show that SOBs have no secondary effects. Like the studies relied on by the County, Dr. Fisher’s studies find large, statistically significant secondary effects.

To support Dr. Fisher’s opinion, Plaintiff’s expert, Dr. Terry A. Danner, analyzes 911 calls-for-service and concludes that the crime-related secondary effects of Palm Beach County SOBs are no larger than the analogous effects of non-SOB controls. We disagree with Dr. Danner’s premise and conclusion.

- The weak correlation between 911 calls and ambient crime makes it (statistically) difficult to detect crime-related secondary effects. Criminologists do not generally use 911 calls to measure ambient crime risk and courts concur with criminologists on this point.

- Nevertheless, Dr. Danner’s analysis of 911 calls fails to address the threshold question of whether SOBs and non-SOB controls in Palm Beach County have equivalent crime-related secondary effects.

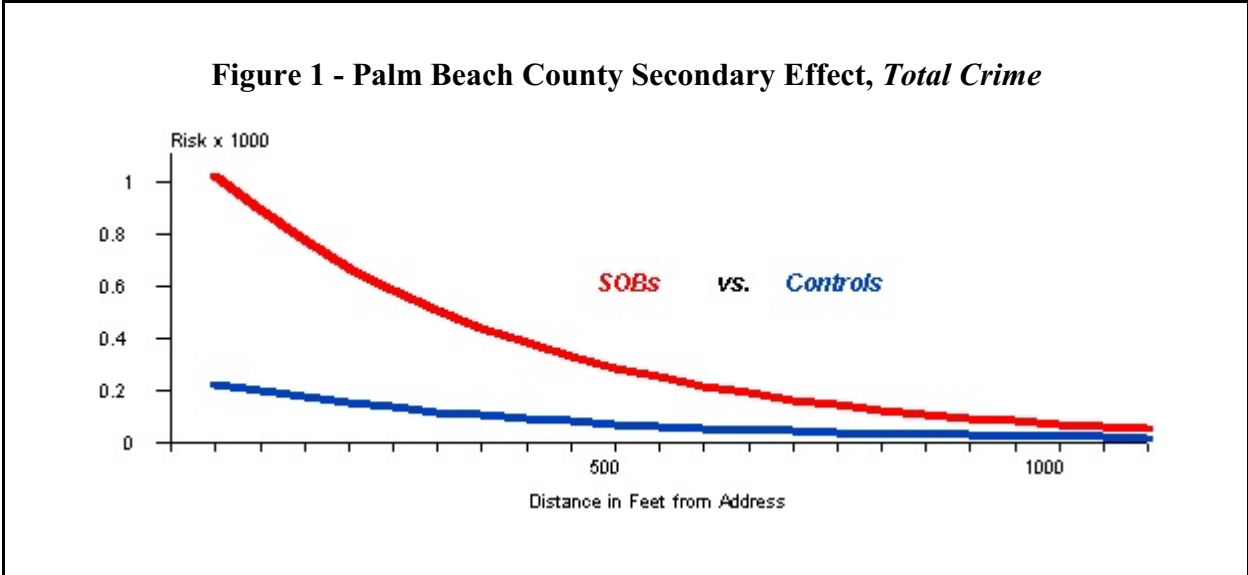
To address this threshold question, we collected *crime incident reports* from the Palm Beach County Sheriff’s Office. Our analyses lead to a different answer and conclusion.

- In both absolute and relative terms, Palm Beach County SOBs have large, significant crime-related secondary effects. The effect is realized in all categories of crime.

For most readers, this secondary effect analysis is the major product of our research.

**1. What Do the Palm Beach County Data Say?**

Figure 1 summarizes our major finding. The horizontal axis gives the distance in feet from the address of an SOB (in red) or a non-SOB control (in blue). The horizontal axis gives the corresponding crime victimization risk or crime rate (x 1,000). For both SOBs (adult cabarets) and non-SOB controls (cabarets), victimization risk rises exponentially as one moves toward the address. As one moves away from the address, risk drops exponentially.

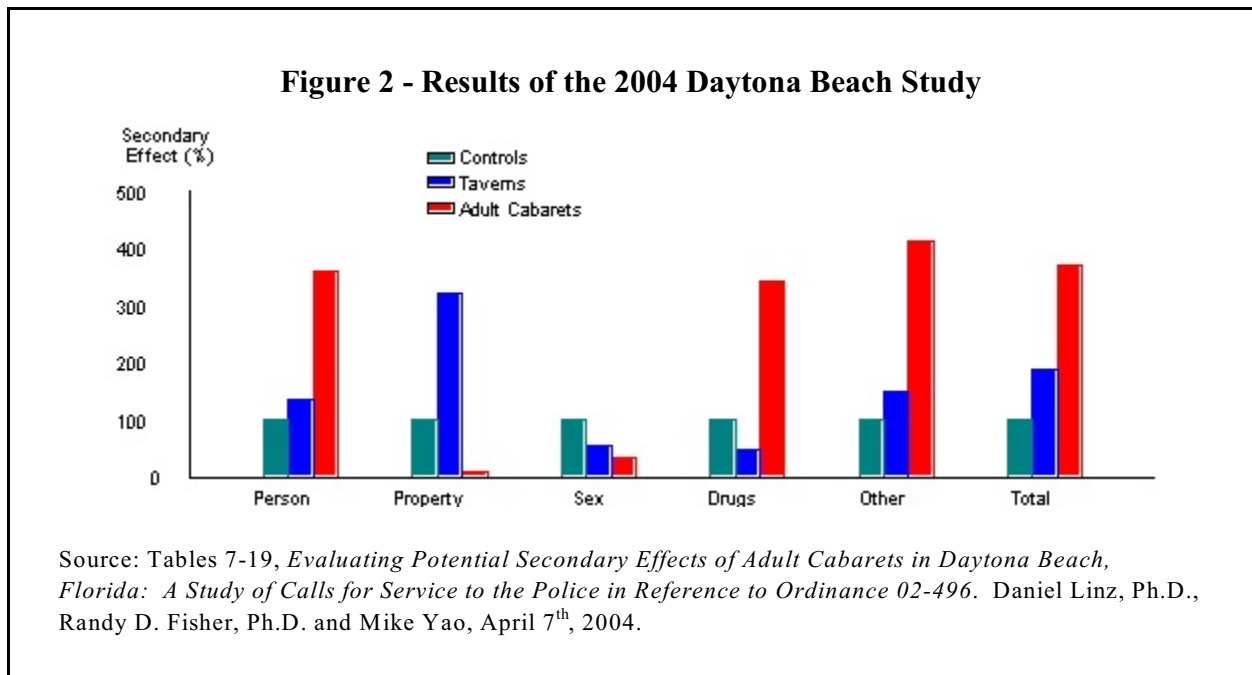


With respect to total crime, Palm Beach County’s adult and non-adult cabarets are risky places. As Figure 1 makes clear, however, SOB sites are much riskier than control sites. At a distance of 500 feet, approximately a long city block, the ambient risk is four times higher at SOB sites. Ambient risk is substantially lower at 1,000 feet. But even at that distance, ambient risk is 3.5 times higher at SOB sites.

The area between the two curves in Figure 1 is a geometric representation of the crime-related secondary effect for Palm Beach County adult cabarets. At the conventional 95 percent confidence level, the estimated effect is statistically significant. The effect is robust, persisting in the face of every reasonable model variation. More important, of course, the effect depicted in Figure 1 is consistent with the larger body of secondary effect studies.

## 2. *The Fisher Report*

One of the studies in this extensive literature is particularly relevant. Figure 2 plots the results of the 2004 Daytona Beach study conducted by Dr. Fisher and his colleagues. The green bars in Figure 2 report the ambient crime for “control” neighborhoods that have neither non-SOB cabarets nor adult cabarets (SOBs). The blue and red bars in Figure 2 report ambient crime for neighborhoods with non-SOB cabarets and adult cabarets, respectively. Ambient crime in the control neighborhoods is fixed at 100 percent to facilitate interpretation. Ambient crime in the non-SOB cabaret and adult cabaret neighborhoods are easily interpreted, then, as multiples of the control neighborhood effects.



The visually striking secondary effects plotted in Figure 2 should speak for themselves. Non-SOB cabaret neighborhoods have 90 percent more total crime than control neighborhoods. But adult cabaret neighborhoods have 270 percent more total crime than control neighborhoods. Although the secondary effects of non-SOB cabarets are *large*, in other words, the secondary effects of adult cabarets are even *larger*.

Despite the visually striking impression of Figure 2, Dr. Fisher’s Daytona Beach results

proved controversial. Although the effects in Figure 2 are significant by conventional criteria, Dr. Fisher used a set of unconventional criteria to argue that his results were *not* significant and, hence, that Daytona Beach adult cabarets had no secondary effects. To the surprise of many, the trial court agreed with this argument and struck down a Daytona Beach anti-nudity ordinance. A panel of the 11<sup>th</sup> Circuit disagreed in *Daytona Grand, Inc. v. City of Daytona Beach, Florida* [No. 06-12022 (11th Cir. 2007), 47-48], noting that, by conventional criteria, Dr. Fisher's estimates were indeed statistically significant.

The experts are no doubt correct that factors other than the presence of adult theaters affect crime rates in Daytona Beach: crime is plainly caused by many factors. But that does little to undermine the City's conclusion that adult theaters *also* affect crime rates, especially when the experts' own analysis shows a statistically significant correlation between adult theaters and increased crime in half of the areas in the study.

This finding is consistent with the striking visual impression of Figure 2.

The *Daytona Grand* decision also rejected Dr. Fisher's methodological attack on the factual predicate of the County's ordinance. To cast doubt on the secondary effects studies relied on by Palm Beach County, Dr. Fisher applied a set of methodological rules proposed by Paul, Linz, and Shafer (Government regulation of adult businesses through zoning and anti-nudity ordinances: debunking the legal myth of negative secondary effects. *Communication Law and Policy*, 2001, 6:355-391). Although these methodological rules are widely cited by SOB plaintiffs, they are not recognized by the scientific community. As of May, 15, 2007, the Linz-Paul-Shafer article had been cited only twice in peer-reviewed journals.

More important, of course, the methodological rules proposed by Paul, Linz, and Shafer have been rejected by the courts. With respect to the methodological rigor of the government's secondary effect evidence, *Daytona Grand* reaffirmed the principle set down in *City of Renton v. Playtime Theatres, Inc.* [475 U.S. 41 (1986)]. The government's evidence must be "reasonably believed to be relevant." The government need not show that its interpretation of the evidence is the only reasonable interpretation, however; nor must it rule out competing interpretations of the evidence. In rejecting the Linz-Paul-Shafer methodological canon, the 11<sup>th</sup> Circuit rejected Dr. Fisher's attack on the County's factual predicate.

### **3. *The Danner Report***

*Daytona Grand* also questioned the use of 911 calls-for service to measure ambient crime risk; the 11<sup>th</sup> Circuit found this use of these data to be "problematic." We concur. In a recent five-year period, *Criminology and Justice Quarterly*, the official journals of the two national criminology professional associations, published 100 articles analyzing a crime-related statistic; only two analyzed 911 calls, but even in these two articles, 911 calls were not used to measure

crime or crime risk (see McCleary, R. and J.W. Meeker. *Journal of Sex Research*, 2006, 43:194-6). Modern criminologists do not use 911 calls to measure crime risk.

Nevertheless, SOB plaintiffs prefer to measure secondary effects with 911 calls-for-service and there are at least three reasons behind this preference:

- Because relatively few “victimless” crimes (drugs, prostitution, etc.) come in through 911 channels, 911 calls understate the incidence of these crimes that weigh so heavily in an SOB’s secondary effect.
- Due to their lower reliability, 911 calls make substantively large secondary effects difficult to detect statistically.
- Many 911 addresses do not give the locations of the precipitating crime incidents. This geo-coding convention can be used to mask the location of a public safety hazard. In a recent Florida case, an SOB proprietor bribed police officers to circumvent and/or to falsify 911 records.

Both Dr. Fisher’s Daytona Beach study (Figure 2) and Dr. Danner’s Palm Beach County study used 911 calls to measure ambient risk.

Analyzing Palm Beach County 911 calls, Dr. Danner finds that adult and non-adult cabarets have the same secondary effects. The stark difference between our finding (Figure 1) and Dr. Danner’s can be attributed in part, of course, to differences in our measures of ambient crime risk – 911 calls *vs.* crime incident reports. A much larger part of the difference is due to the different ways we define “ambient.” Whereas we count crime incidents over a large area around the SOB and non-SOB sites, Dr. Danner counts 911 calls to the site address.

For crime-related calls, Dr. Danner finds that SOB addresses have 2.5 calls per month on average *vs.* 2.9 for non-SOB control addresses. For public order calls, SOB addresses have 3.1 calls per month *vs.* 2.0 for non-SOB control addresses. In Dr. Danner’s opinion, this “does not provide compelling evidence that the addition of various levels of nude dancing to the ‘nightclub type environment’ produces a pattern of crime and public disorder that appears to be uniquely attributable to the adult cabaret category of business and that the generalization contained in the ‘Finding of Fact’ section of the Palm Beach County Adult Entertainment ordinance must be called into question by the findings of this research.”

There are three fundamental problems with Dr. Danner’s conclusion. First, by failing to subject these differences to tests of statistical significance, Dr. Danner has violated one of Dr. Fisher’s most important methodological rules. Although we have not calculated the confidence levels of the differences reported by Dr. Danner, the combined difference may be significant by conventional criteria.

Ignoring that problem, Dr. Danner assumes that public safety hazards are contained to the address. If the hazard “seeps out” across the neighborhood, on the other hand, secondary effect estimates are biased in an unknown way. The risk-distance function plotted in Figures 1 raises this point.

Ignoring that problem, Dr. Danner’s analyses assume that 911 calls-for-service are an acceptable measure of crime risk. That assumption is unwarranted. The 11<sup>th</sup> Circuit in *Daytona Grand* (and decisions in at least three other Circuits) have rejected attempts by plaintiffs to use local studies based on 911 calls-for-service to cast direct doubt on an ordinance that the local government supported with evidence of the sort relied upon by the County. In short, analyses of these data are not sufficient to meet the standards required under *Alameda Books* to cast doubt on the evidence proffered by the County to support the ordinance.

#### **4. Conclusions**

Based on our analyses of crime data and on our synthesis and review of the secondary effects literature, the factual predicate of the Palm Beach County Ordinance is sufficient. Efforts to cast doubt on the County’s factual predicate by Dr. Fisher fails to shift the burden of proof to the County. Dr. Fisher’s Daytona Beach study, in particular, demonstrates that adult cabarets have large, significant crime-related secondary effects. Dr. Fisher’s methodological attacks on other foreign empirical secondary effect studies have been rejected by four Circuits, including the 11<sup>th</sup> in *Daytona Grand*.

The study of Palm Beach County 911 calls by Dr. Danner, which was intended to buttress Dr. Fisher’s critique of the foreign predicate evidence, also fails. The use of 911 calls to measure ambient crime risk has been questioned by four Circuits, including again the 11<sup>th</sup> in *Daytona Grand*. Dr. Danner’s analyses also assume that the ambient crime risk for a site is limited to the site’s address. In fact, as our study demonstrates, crime risk extends into the neighborhood, diminishing as an exponential function of distance from the site. Our study clearly shows the presence of crime-related secondary effects in Palm Beach County.