

ISSN 1936-5349 (print)
ISSN 1936-5357 (online)

HARVARD

JOHN M. OLIN CENTER FOR LAW, ECONOMICS, AND BUSINESS
FELLOWS' DISCUSSION PAPER SERIES

ZONING ADULT BUSINESSES:
EVALUATING THE SECONDARY
EFFECTS DOCTRINE

Britt Cramer

Discussion Paper No. 48

01/2013

Harvard Law School
Cambridge, MA 02138

Contributors to this series are John M. Olin Fellows or Terence M. Considine Fellows in Law and Economics at Harvard University.

This paper can be downloaded without charge from:

The Harvard John M. Olin Fellow's Discussion Paper Series:
http://www.law.harvard.edu/programs/olin_center/

**ZONING ADULT BUSINESSES:
EVALUATING THE SECONDARY EFFECTS DOCTRINE**

Britt Cramer*

Abstract

To date the Supreme Court has endorsed two approaches that municipalities may adopt when attempting to handle the problem of zoning adult businesses in communities that are opposed to the expression of that manner of free speech. In *Young v. American Mini Theatres*, 427 U.S. 50 (1976) the Court upheld portions of a Detroit “Anti-Skid Row Ordinance” that required that certain adult establishments not be permitted within 1,000 feet of another regulated establishment, or within 500 feet of a residential area. This approach – which I call “cracking” for shorthand – was deemed a permissible zoning regulation despite the incidental burdens it placed on speech in part because the Court was willing to find that the government’s interest in regulating the negative “secondary effects” that accompanied such establishments a “legitimate government objective.” A decade later, the Court also upheld a similar zoning ordinance in *Renton v. Playtime Theatres, Inc.*, 475 U.S. 41 (1986) also on the grounds that such regulation of “secondary effects” was a permissible justification for burdening speech. However, the solution proposed in the ordinance at issue in *Renton* was markedly different than that offered in *American Mini Theatres*; it promoted concentrating the establishments in one zoned area rather than dispersing them – “packing” the establishments for short. This article is the first to evaluate the relative effectiveness and desirability of the “cracking” versus “packing” approach from a law and economics perspective. To do so, I evaluate which approaches were in practice adopted by communities on the ground in the years since the Supreme Court advanced the secondary effects doctrine, and explore the benefits and drawbacks of each approach from an efficiency standpoint. This article suggests that cities are being disingenuous in explaining their motivations for overwhelmingly adopting the “cracking” approach.

* J.D., Harvard Law School (brittcramer@post.harvard.edu). I would like to thank Adam Chilton, Brian Feinstein, Louis Kaplow, Martha Minow, Henry Smith, Adrian Vermeule, and participants in the Harvard Law School Public Law Workshop for helpful comments and suggestions. Special thanks are due to Steve Shavell. I am grateful to the John M. Olin Foundation at Harvard University for financial support.

**ZONING ADULT BUSINESSES:
EVALUATING THE SECONDARY EFFECTS DOCTRINE**

Britt Cramer

© 2012 Britt Cramer. All rights reserved.

Table of Contents

Introduction.....	1
I. Legal Standards for Regulating Adult Businesses.....	5
A. Municipality Zoning Power	6
B. The “Problem” of Zoning Adult Businesses.....	7
1. Adult Entertainment as Protected Speech.....	8
2. Standards of Judicial Review in First Amendment Cases.....	9
C. The Secondary Effects Doctrine.....	12
1. Introduction of the Doctrine: Young v. American Mini Theatres.....	13
2. Solidification of the Doctrine: Renton v. Playtime Theatres.....	15
3. Criticism of the Secondary Effects Doctrine.....	19
D. The Erogenous Zoning Puzzle.....	20
II. Cracking Versus Packing – The Modern Landscape.....	21
A. Means of Evaluation – Municipality Reports	22
1. Determining the Relevant Set of Reports.....	23
2. Basic Facts about the Reports.....	28
B. Secondary Effects Examined.....	33
1. Crime.....	35
2. Real Estate Devaluation.....	41
3. Blight and Noise.....	48
C. Cracking Versus Packing.....	49
III. Why Consensus Does Not Equal Correctness.....	51
A. Low Transaction Costs May Unduly Influence Municipalities.....	52
1. Ease of Justification.....	52
2. Political Catering to Moral Objections.....	54
B. Efficiency-Based Reasons to Prefer the Packing Approach.....	56
1. Cost Effective Isolation of Adult Uses from Sensitive Populations.....	56
2. Efficient Use of Public Resources.....	59
3. Lower Administrative Costs.....	60
Conclusion	63

INTRODUCTION

There are many possible ways to understand the purposes of the First Amendment – as a means of protecting a “marketplace of ideas” through which truth can be discovered,¹ as a social good that ensures that “people are aware of all the issues before them and the arguments on both sides of these ideas,”² as a manner of “assuring individual self-fulfillment,”³ or as an instrument for ensuring “equal liberty” for different groups.⁴ One need not pick between these competing purposes in order to ascertain that the First Amendment is ultimately a doctrine that “is at its core about the correct response to the fact that speech can increase the risk of social harm.”⁵ When contemplated in this light, the First Amendment is properly understood as a tool for calibrating or mitigating risk. Thus, jurisprudence implementing free speech principles can be evaluated as either commendable or problematic based on the holding’s resultant impact on overall social utility.⁶

One area where this function of the First Amendment is most clearly on display is in cases advancing the “secondary effects doctrine” – a doctrine that permits local government entities such as city councils or county legislatures to regulate speech activities indirectly

¹ See *Abrams v. United States*, 250 U.S. 616, 630 (1919) (Holmes, J., dissenting) (“[T]he best truth is the power of the thought to get itself accepted in the competition of the market.”).

² OWEN FISS, *LIBERALISM DIVIDED* 5 (1996).

³ Thomas I. Emerson, *Toward a General Theory of the First Amendment*, 72 *YALE L.J.* 877, 878 (1963) (listing this as among possible purposes underlying the First Amendment).

⁴ See generally Kenneth L. Karst, *Equality as a Central Principle in the First Amendment*, 43 *U. CHI. L. REV.* 20, 21 (1975).

⁵ Mark Tushnet, *The First Amendment and Political Risk* (manuscript presented at Harvard Law School Public Law Workshop, September 28, 2011); see also Paul Horwitz, *Free Speech as Risk Analysis: Heuristics, Biases, and Institutions in the First Amendment*, 76 *TEMPLE L. REV.* 1 (2004) (arguing that scholars ought to “realize the benefits of a new guiding metaphor for First Amendment analysis, in which First Amendment law is a species of risk analysis,” *id.* at 9, and analyzing jurisprudence from this perspective). *But see* C. Edwin Baker, *Harm, Liberty, and Free Speech*, 70 *S. CAL. L. REV.* 979, 981 (1997) (arguing that “the harmfulness of a person’s speech itself never justifies a legal limitation on the person’s freedom of speech”).

⁶ *But see* Michael Coenen, *On Speech and Sanctions: Toward a Penalty-Sensitive Approach to the First Amendment*, 112 *COLUM. L. REV.* (forthcoming June 2012) (asserting that “[c]ourts confronting First Amendment claims do not often scrutinize the severity of a speaker’s punishment” and calling for a more penalty-sensitive approach to increase fairness and other virtues).

through zoning in limited circumstances, namely when the negative secondary effects of such speech (such as increase in crime or neighborhood decay) are deemed sufficiently detrimental.⁷ In this subset of First Amendment cases,⁸ courts are explicitly asked to evaluate tradeoffs between the unfavorable impact on the speech being burdened by regulation and the positive effects that result from mitigating the risk factors that (allegedly) result from such speech.⁹ Traditionally, the Court has primarily permitted the secondary effects doctrine to be applied when zoning regulations pertaining to sexually oriented businesses (SOBs) are at issue¹⁰ – in the so-called “erogenous zoning” cases.¹¹

The issue of erogenous zoning is not insignificant. The adult entertainment industry generates enormous profits and appeals to a large portion of the population: In 2006 alone Americans spent over thirteen billion dollars on “X-rated magazines, videos and DVDs, live sex shows, strip clubs, adult cable shows, computer pornography, and commercial telephone sex.”¹² Meanwhile, the number of rentals and sales of X-rated films increased from 75 million in 1985

⁷ See Christopher J. Andrew, Note, *The Secondary Effects Doctrine: The Historical Development, Current Application, and Potential Mischaracterization of an Elusive Judicial Precedent*, 54 RUTGERS L. REV. 1175, 1175 (2002) (“The secondary effects doctrine allows a court to characterize a speech regulation as content-neutral instead of content-based and apply intermediate scrutiny if the regulation is aimed at suppressing the ‘secondary effects’ of the speech and not the speech itself.”).

⁸ The Supreme Court has refused to allow secondary effects analysis to proceed in every case implicating First Amendment values, and has held that when a regulation is aimed at the *primary* effects of speech, strict scrutiny evaluation is appropriate. *Id.*; see *Reno v. ACLU*, 521 U.S. 844, 868 (1997) (determining the Communications Decency Act was not content-neutral, but was designed to “protect children from the primary effects of ‘indecent’ and ‘patently offensive’ speech, rather than any ‘secondary’ effect of such speech”).

⁹ Cf. Lisa Yoshida, Note, *The Role of “Secondary Effects” in First Amendment Analysis: Renton v. Playtime Theatres, Inc.*, 22 U.S.F. L. REV. 161, 171 (1987).

¹⁰ See David L. Hudson, Jr., *The Secondary Effects Doctrine: “The Evisceration of First Amendment Freedoms,”* 37 WASHBURN L.J. 55, 70 (1997). *But see* Philip J. Prygoski, *The Supreme Court’s “Secondary Effects” Analysis in Free Speech Cases*, 6 COOLEY L. REV. 1 (1989) (discussing doctrine’s application in non-zoning case *Boos v. Barry*, 106 S. Ct. 1157 (1996) as extension of doctrine to political speech in a public forum).

¹¹ See, e.g., KATHLEEN M. SULLIVAN & GERALD GUNTHER, *FIRST AMENDMENT LAW* (4th ed. 2010).

¹² Ronald Weitzer, *Sex Work: Paradigms and Policies*, in *SEX FOR SALE: PROSTITUTION, PORNOGRAPHY, AND THE SEX INDUSTRY 1* (Ronald Weitzer ed., 2d ed. 2010) (referencing Jerry Ropelato, *Internet Pornography Statistics, TOP TEN REVIEWS* (2006), <http://internet-filter-review.toptenreviews.com/internet-pornography-statistics.html>).

to roughly 665 million by 1996,¹³ with thirty-four percent of American men and sixteen percent of American women reporting that they had seen an X-rated video in the past year.¹⁴

Commentators estimate that, as of 2010, there were roughly 3,500 strip clubs in America¹⁵ and a 1991 survey found that roughly eleven percent of the population claimed to have been to such an establishment within the previous year.¹⁶

However, despite adult entertainment's apparent statistical popularity, the question of where and how a sexually oriented business may join a community remains controversial. As recently as May 2011, nearly a third of Americans surveyed asserted that they believe that pornography is morally wrong.¹⁷ And as of 1991, almost half of the American public stated that they felt that strip clubs ought to be illegal.¹⁸ Thus, paradoxically, even as the adult entertainment industry continues to expand in popularity and becomes increasingly mainstream, countless jurisdictions throughout the United States have taken measures to restrict and regulate access to these establishments through implementing zoning strategies that are ostensibly designed to ameliorate those non-speech "secondary effects" that accompany such businesses.¹⁹

To date, under this secondary effects doctrine, the Supreme Court has permitted cities to adopt two diametrically opposed zoning approaches for regulation of adult businesses: In one approach, the city requires that sexually oriented businesses maintain a certain distance apart, a

¹³ See Eric Schlosser, *The Business of Pornography*, U.S. NEWS & WORLD REP. (Feb. 2, 1997), available at http://www.usnews.com/usnews/biztech/articles/970210/archive_006163.htm.

¹⁴ Weitzer, *supra* note 12, at 1 – 2 (percentages accurate for 2002).

¹⁵ *Id.*, at 1.

¹⁶ See *id.* (citing Gallup Organization, *Gallup Poll Monthly no. 313* (October 1991)).

¹⁷ Gallup Organization, *Moral Issues* (2008), available at <http://www.gallup.com/poll/1681/Moral-Issues.aspx>.

¹⁸ See Weitzer, *supra* note 12, at 3 (referencing Gallup, *Gallup Poll Monthly* (1991) (finding that 46% thought female strippers and 45% thought male strippers "should be illegal at bars or clubs")).

¹⁹ See Clay Calvert & Robert D. Richards, *Stripping Away First Amendment Rights: The Legislative Assault on Sexually Oriented Businesses*, 7 N.Y.U. J. LEGIS. & PUB. POL'Y 287, 288 – 89 (2004) ("Whether targeting the location of sexually oriented businesses or restricting what goes on inside them, large cities, small towns, and scattered counties throughout the United States are stepping up efforts to regulate the purveyors of adult entertainment.").

method here denoted as cracking.²⁰ In the other, the city zones the relevant speech activity into one designated area, in effect packing like business uses into one zone.²¹ There has been an abundance of literature discussing whether adult establishments do in fact lead to negative secondary effects and which thus questions the validity of pursuing *either* approach in an effort to minimize these undesirable effects.²² Additionally, many scholars have detailed the potential detrimental impact that the secondary effects doctrine has had on First Amendment jurisprudence more generally.²³ But despite this attention, no attempt appears to have been made to determine which of the Court-approved methods of secondary effect regulation strikes the most desirable balance between the speech that is burdened and the “effects” that are ostensibly regulated – in other words, no one has yet examined which approach to zoning leads to increased *overall social utility*. As a consequence, both courts and scholars appear to advance the idea that either of these means of regulation is permissible without determining which approach is superior to the other. This is problematic when we consider the First Amendment’s role as a political risk tool: if the scholarly evaluation of this doctrine stops at the constitutional inquiry, it does not ultimately answer the underlying risk assessment question that supposedly motivates the jurisprudence.

This paper is the first attempt to compare the likely impact of each of the two approved approaches to erogenous zoning on overall social utility, and in so doing details the advantages and disadvantages that each method may possibly bring to cities. To that end, this project

²⁰ Young v. Am. Mini Theatres, Inc., 427 U.S. 50, 62 (1976).

²¹ City of Renton v. Playtime Theatres, Inc., 475 U.S. 41, 54 (1986).

²² E.g., Daniel Linz et al., *An Examination of the Assumption that Adult Businesses Are Associated with Crime in Surrounding Areas: A Secondary Effects Study in Charlotte, North Carolina*, 38 L. & SOC’Y REV. 69, 97 (2004) (“We found that, at least in Charlotte, North Carolina, it is not the case that the presence of an adult nightclub increases the number of crime incidents reported in localized areas that do not contain an adult nightclub.”). *But see* Richard McCleary & James W. Meeker, *Do Peep Shows “Cause” Crime? A Response to Linz, Paul, and Yao*, 43 J. SEX RES. 194, 194 (2006) (“We disagree not only with the Linz et al. [null] finding, but also with the logical adequacy of their conclusion.”).

²³ E.g., Hudson, *supra* note 10, at 56 (calling the secondary effects doctrine a “direct attack on adult expression” that has eviscerated First Amendment freedoms).

proceeds in three main parts. Part I discusses the legal framework that gave rise to the secondary effects doctrine, and reviews the legal standards for regulating adult businesses in order to explain how the cracking and packing approaches came to be viewed as equally acceptable means of handling erogenous zoning. Part II then examines the rationales that municipalities themselves set forth when justifying which erogenous zoning scheme to adopt, in an attempt to discern whether cities already approach this issue with an explicit view to enhancing overall social utility. Finally, Part III explores reasons why the logic currently animating numerous erogenous zoning schemes throughout the United States is likely insufficiently attendant to optimal strategy, and provides suggestions as to why the less common approach to erogenous zoning may in fact be superior from a social welfare standpoint.

I. LEGAL STANDARDS FOR REGULATING ADULT BUSINESSES

An issue with which nearly every city struggles is determining the optimal tradeoffs to make when zoning the many potentially incompatible uses that may be encompassed within a single township. Deciding where to permit different kinds of businesses and activities is often a contentious political struggle that impacts economic activity, city character, and quality of life for city residents.²⁴ Of these decisions, one of the most difficult and controversial is zoning businesses that cater to adult entertainment, such adult bookstores, theatres, strip clubs, and cabarets.²⁵ Municipalities determining how to handle these questions have faced antagonistic battles in local government and eventually many of these controversies have carried over even to

²⁴ See, e.g., Brent Jones, *City to Vote Today on Clinic Zoning*, BALTIMORE SUN (Oct. 30, 2006), available at http://articles.baltimoresun.com/2006-10-30/news/0610300117_1_drug-treatment-centers-methadone-clinics-drug-clinics (detailing difficulty of reaching compromise between parties opposing or supporting the placement of drug treatment centers in residential areas).

²⁵ See Shima Baradaram-Robinson, *Viewpoint Neutral Zoning of Adult Entertainment Businesses*, 31 HASTINGS CONST. L.Q. 447, 447 (2004) (“Zoning of strip clubs, adult video stores, and other adult entertainment businesses is a frequent source of controversy and litigation in many American cities.”).

the courts.²⁶ This Part begins by reviewing the legal rules that typically govern a city’s zoning powers. It then details why adult businesses fall outside this basic, permissive framework. Finally, the doctrine of “secondary effects” is presented via review of the Supreme Court precedent establishing this approach to regulating adult businesses and the puzzle of divergent erogenous zoning approaches is introduced.

A. Municipality Zoning Power

Generally, “a municipality’s exercise of its zoning powers is valid if the regulation serves a rational interest of the local government”²⁷ provided that the regulation does not “deprive the owner of the economic use of his property.”²⁸ This permissive standard was first established in the landmark case *Village of Euclid v. Ambler Realty Co.*, which held that a municipality was entitled to enact a comprehensive scheme of zoning – separating properties into use classes, as well as into various height and area classes – as part of its state-granted police powers.²⁹ Today, most zoning acts “are based on the language of the *Euclid* era and permit zoning for the purpose of promoting the health, safety, morals, or general welfare of the community.”³⁰ Therefore, a city typically can combat a wide variety of perceived societal ills that may impact its citizens by instituting zoning regulations pertaining to that subject matter.

Furthermore, courts have read the economic deprivation limitation set forth in *Euclid* extremely narrowly when evaluating the permissibility of zoning regulations that negatively impact a property owner’s asset. The Supreme Court has held that a zoning scheme does not constitute a government taking in violation of the Fifth Amendment unless the regulation

²⁶ *Id.*

²⁷ David J. Christiansen, Note, *Zoning and the First Amendment Rights of Adult Entertainment*, 22 VAL. U. L. REV. 659, 701 (1988); see *Village of Euclid v. Ambler Realty Co.*, 272 U.S. 365, 389 (1926).

²⁸ Kenneth Pearlman, *Zoning and the First Amendment*, 16 URB. LAW. 217, 220 (1984).

²⁹ See generally *Euclid*, 272 U.S. at 365.

³⁰ Christiansen, *supra* note 27, at 699.

destroys “all viable use” of the impacted property,³¹ a standard that is rarely met. As a consequence, nearly all zoning regulations are subject to only minimal judicial scrutiny – rational basis review – and most municipalities need merely make a plausible showing of any legitimate governmental interest in order to have their zoning regulations upheld by the judiciary.³² Indeed, even where zoning enactments are fairly debatable as to whether they validly derive from the police powers granted to the city by the state government, courts have insisted that deference should be given to legislative discretion about the regulation’s necessity and purpose.³³ Thus, courts have established a presumption of rationality for zoning ordinances, which prevails unless the scheme can be shown to be clearly arbitrary and capricious.

B. The “Problem” of Zoning Adult Businesses

However, an important constitutional restraint always operates upon a municipality’s ability to enact far-reaching regulations. Namely, a city’s usually-permissive power to create zoning plans for the community “is tempered by the First Amendment,”³⁴ which places upon the judiciary a responsibility to more closely evaluate, and at times invalidate, government regulations that unconstitutionally abridge the free speech right protected under its ambit.³⁵ As a consequence of this heightened scrutiny, jurisdictions faced with the prospect of regulating adult speech face the thorny problem of justifying their regulations without respect to the protected content of the activity at hand.

³¹ *E.g.* *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992).

³² *See Euclid*, 272 U.S. at 389.

³³ *See Zahn v. Board of Public Works*, 274 U.S. 325 (1927).

³⁴ *Baradaram-Robinson*, *supra* note 25, at 31.

³⁵ U.S. CONST. amend. I (“Congress shall make no law . . . abridging the freedom of speech.”). The Fourteenth Amendment further extends this duty over regulations at state or local levels. *See* U.S. Const. amend. XIV, § 1; *Gitlow v. New York*, 268 U.S. 652, 666 (1925) (“[W]e may and do assume that freedom of speech and of the press – which are protected by the First Amendment from abridgment by Congress – are among the fundamental personal rights and ‘liberties’ protected by the due process clause of the Fourteenth Amendment from impairment by the States.”).

1. Adult Entertainment as Protected Speech.

While “speech” is most commonly thought of as encompassing either written or spoken communication, certain actions can also sometimes be entitled to First Amendment protection if they are deemed to be “expressive conduct” – conduct in which “[a]n intent to convey a particularized message was present, and in the surrounding circumstances the likelihood was great that the message would be understood by those who viewed it.”³⁶ Although determining whether conduct ought to be viewed as truly expressive (and thus, protected) rather than as merely non-speech activity is often a daunting venture,³⁷ case law has made clear that certain conduct pursuant to the provision of adult entertainment qualifies for First Amendment treatment; the Supreme Court has recognized that “at least some of the performances to which [adult entertainment] regulations address themselves are within the constitutional protection of freedom of expression.”³⁸ Therefore, while there are “certain well-defined and narrowly limited classes of speech, the prevention and punishment of which have never been thought to raise any Constitutional problem”³⁹ – categories including “the lewd and obscene, the profane, the libelous, and the insulting or ‘fighting words’”⁴⁰ – these categories have become ever more

³⁶ *Spence v. State of Wash.*, 418 U.S. 405, 410 – 11 (1974) (finding flag misuse statute unconstitutional as applied to student hanging privately-owned flag upside down, with a peace symbol affixed as means of expressing opinion that America stood for peace).

³⁷ *E.g.* R. George Wright, *What Counts as “Speech” in the First Place?: Determining the Scope of the Free Speech Clause*, 37 PEPP. L. REV. 1217, 1251 – 56 (2010) (asserting it is difficult at times to distinguish protected expressive conduct from other conduct).

³⁸ *California v. LaRue*, 409 U.S. 109, 118 (1972); *cf.* *City of Eire v. Pap’s A.M.*, 529 U.S. 277, 289 (2000) (“[N]ude dancing of the type at issue here is expressive conduct, although we think that it falls only within the outer ambit of the First Amendment’s protection.”) (citing *Barnes v. Glen Theatre, Inc.*, 501 U.S. 560, 565 – 66 (1991)).

³⁹ *Chaplinsky v. New Hampshire*, 315 U.S. 568, 571 – 72 (1942).

⁴⁰ *Id.*

restricted in scope and the Supreme Court has declined to group the majority of the services or products offered by adult establishments within the ambit of unprotected speech.⁴¹

As a consequence, local governments are somewhat constrained in the approaches they are permitted to take when regulating the adult entertainment industry. “The government generally has a freer hand in restricting expressive conduct than it has in restricting the written or spoken word,” but it may not “proscribe particular conduct *because* it has expressive elements.”⁴² Thus, despite the fact that local opposition to adult entertainment establishments may be extremely high,⁴³ townships are not permitted to ban these enterprises outright, although they may place zoning restrictions on them.⁴⁴ Moreover, because courts recognize that “many localities [may] shape zoning schemes to the demise of the commercial potential and strength of the adult entertainment businesses”⁴⁵ and thereby indirectly eliminate this protected speech activity, such schemes are subjected to a higher level of scrutiny than are typical zoning ordinances.

2. *Standards of Judicial Review in First Amendment Cases.*

Once it is apparent that the activity being governmentally regulated entails protected speech activity, courts must determine what level of scrutiny to apply to the ordinance at issue in

⁴¹ See, e.g., *Barnes*, 501 U.S. at 560 (Souter, J., concurring) (asserting that certain kinds of nude dancing, including that “carrying an endorsement of erotic experience,” is expressive activity deserving of First Amendment protection).

⁴² *Texas v. Johnson*, 491 U.S. 397, 406 (1989) (finding flag burning protected expressive conduct given circumstances).

⁴³ Cf. Dana M. Tucker, *Preventing the Secondary Effects of Adult Entertainment Establishments: Is Zoning the Solution?*, 12 J. LAND USE & ENVTL. L. 383, 408 (1996) (“Residents of communities located near some of these some of these businesses have many reasons for disliking the establishments. . . . Public hearings have overflowed with . . . concerns about traffic, property devaluation, prostitution, and other crimes.”).

⁴⁴ Cf. *C.R. of Rialto, Inc. v. City of Rialto*, 964 F. Supp. 1401, 1405 (S.D. Cal. 1997) (“The law is well established that a city may not enact zoning regulations that result in the total ban of adult oriented businesses, or make it practically impossible for them to locate within the city, because such regulations violate the business operator’s right to free expression of speech under the First Amendment.”).

⁴⁵ Comment, *Freedom of Expression and Adult Entertainment: The Naked Truth*, 37 DUQ. L. REV. 103, 113 (1998).

order to evaluate its constitutionality. It is permissible for a governmental regulation to “‘abridge’ protected speech in certain circumstances pursuant to judicially prescribed and supervised limitations.”⁴⁶ Generally speaking, courts divide regulations that impact protected speech into two distinct categories – “content-based laws” and “content-neutral laws.”⁴⁷ The category to which the regulation is designated determines the level of scrutiny that courts apply in order to determine the law’s constitutionality.⁴⁸

(a) *Content-Based Laws.* — In *Police Department of Chicago v. Mosley*,⁴⁹ Justice Marshall’s majority opinion asserts that “above all else, the First Amendment means that government has no power to restrict expression because of its message, its ideas, its subject matter, or its content.”⁵⁰ In adherence to this guiding principle, regulations that are expressly “related to the suppression of expression”⁵¹ – or content-based laws – are “presumptively invalid”⁵² and thus subject to strict judicial scrutiny.⁵³ In order to survive strict scrutiny review, a content-based law must advance a “compelling state interest” using a “narrowly tailored” or “least restrictive means to further the articulated interest.”⁵⁴ As a result of this stringent standard, numerous laws that are “aim[ed] at ideas or information”⁵⁵ (i.e. at the subject matter of

⁴⁶ Andrew, *supra* note 7, at 1178.

⁴⁷ See Ofer Raban, *Content-Based, Secondary Effects, and Expressive Conduct: What in the World Do They Mean (and What Do They Mean to the United States Supreme Court)?*, 30 SETON HALL L. REV. 551, 553 (2000).

⁴⁸ *Id.*

⁴⁹ 408 U.S. 92 (1972).

⁵⁰ *Id.* at 95.

⁵¹ See *Texas v. Johnson*, 491 U.S. 397, 403 (1989).

⁵² *R.A.V. v. City of St. Paul*, 505 U.S. 377, 382 (1992) (“Content-based regulations are presumptively invalid.”).

⁵³ See SULLIVAN & GUNTHER, *supra* note 11, at 197 – 232.

⁵⁴ See, e.g., *Sable Communications of Cal., Inc. v. FCC*, 492 U.S. 115, 126 (1989).

⁵⁵ LAURENCE H. TRIBE, *AMERICAN CONSTITUTIONAL LAW* § 12-2, at 789, 790 (2d ed. 1988); see, e.g., *Burson v. Freeman*, 504 U.S. 191, 197 (1992).

the speech at issue), rather than at the noncommunicative content of the activity espousing such ideas,⁵⁶ have been struck down as unconstitutional.

(b) *Content-Neutral Laws.* — If a law is not a content-based regulation, then by default it is a content-neutral regulation – one “not based on the speech’s subject matter, but rather on accidental attributes with which one can tamper without altering the meaning being conveyed.”⁵⁷ Unlike content-based laws, content-neutral laws bear no presumption of invalidity, and thus are subject only to intermediate scrutiny because they usually “pose a less substantial risk of excising certain ideas or viewpoints from the public dialogue.”⁵⁸ Under intermediate scrutiny, a regulation will not be upheld unless it both advances an important government interest unrelated to the suppression of speech and does not burden substantially more speech than is necessary.⁵⁹ Thus, courts applying this standard have allowed protected speech to be subject to content-neutral time, place, and manner restrictions, provided these rules are “narrowly tailored to serve a significant governmental interest, and that they leave open ample alternative channels for communication of the information.”⁶⁰ Restrictions on expressive conduct that are content-neutral are required to meet similar requirements.⁶¹

(c) *Distinguishing between the Categories.* — Because regulations that are content-based receive more rigorous constitutional scrutiny than do those that are content-neutral, the

⁵⁶ Cf. John Hart Ely, *Flag Desecration: A Case Study in the Roles of Categorization and Balancing in First Amendment Analysis*, 88 HARV. L. REV. 1482, 1498 (1975) (explaining that the Supreme Court correctly categorized a regulation as content based by saying that “the critical point in *Cohen v. California* . . . is that the dangers on which the state relied were dangers that flowed entirely from the communicative content of Cohen’s behavior”).

⁵⁷ Raban, *supra* note 47, at 555.

⁵⁸ *Turner Broad. Sys. Inc. v. FCC*, 512 U.S. 622, 642 (1994).

⁵⁹ See generally Ashutosh Bhagwat, *The Test that Ate Everything: Intermediate Scrutiny in First Amendment Jurisprudence*, 2007 U. ILL. L. REV. 783 (2007).

⁶⁰ *Clark v. Cmty. for Creative Non-Violence*, 468 U.S. 288, 293(1984).

⁶¹ Technically, regulations pertaining to expressive conduct are subject to the four-part test set forth in *United States v. O’Brien*, 391 U.S. 367 (1968) but this standard is essentially interchangeable with the time, place, and manner standard detailed in the text. *Clark*, 468 U.S. at 298 (“[V]alidating a regulation of expressive conduct . . . is little, if any, different from the standard applied to time, place or manner restrictions.”).

“determination of what constitutes a content-based regulation is . . . of considerable importance.”⁶² Perhaps in recognition of the significance of the inquiry, the Supreme Court has acknowledged that “[d]eciding whether a particular regulation is content based or content neutral is not always a simple task.”⁶³ In particular, regulations that impact conduct consisting simultaneously of both a communicative aspect and a noncommunicative aspect can be extremely difficult to classify between the binary categories.⁶⁴ Nevertheless, this distinction seemed workable to most observers on an intuitive level – that is, until the Supreme Court introduced the doctrine of “secondary effects,” which blurred the line between content-based and content-neutral governmental restrictions on protected speech.⁶⁵

C. The Secondary Effects Doctrine

The “puzzling doctrine of secondary effects”⁶⁶ is a method of First Amendment analysis that “essentially reduces the severity of scrutiny with which the courts analyze a restriction where a purpose behind the regulation is to reduce negative secondary effects that can be associated with speech.”⁶⁷ In other words, the doctrine permits a court to classify as content-neutral speech restrictions “those that ‘are *justified* without reference to the content of the regulated speech’”⁶⁸ and thereby allows government bodies to enact legislation targeting

⁶² Raban, *supra* note 47, at 553.

⁶³ *Turner Broad. Sys.*, 512 U.S. at 642.

⁶⁴ *Cf. Andrew*, *supra* note 7, at 1181.

⁶⁵ John Fee, *The Pornographic Secondary Effects Doctrine*, 60 ALA. L. REV. 291, 292 (2009) (“Generally, whether a regulation is content-based or content-neutral is resolved by looking at the face of it. . . . The secondary effects doctrine is one exception to this usual methodology.”).

⁶⁶ Seana Valentine Shiffrin, *Speech, Death and Double Effect*, 78 N.Y.U. L. REV. 1135, 1148 (2003).

⁶⁷ Brandon L. Lemley, *Effectuating Censorship: Civic Republicanism and the Secondary Effects Doctrine*, 35 J. MARSHALL L. REV. 189, 192 n.13 (2002); *see also* Fee, *supra* note 65, at 292 (“[The secondary effects doctrine] provides that a regulation will be treated as content-neutral and subject to intermediate scrutiny, despite its content-discriminatory form, if the primary purpose of the regulation is to control the secondary effects rather than the primary effects of speech.”).

⁶⁸ *Boos v. Barry*, 485 U.S. 312, 320 (1988) (quoting *Virginia Pharmacy Board v. Virginia Citizens Consumer Council, Inc.*, 425 U.S. 748, 771 (1976)).

disfavored protected speech “where the purpose is to reduce the harmful non-speech antecedent effects that derive from certain types of speech.”⁶⁹ Application of the secondary effects doctrine has primarily been upheld in the adult business zoning context,⁷⁰ and in fact the cases from which the doctrine evolved exclusively concerned city ordinances that impacted the property rights of adult establishments. This Part discusses the emergence of the doctrine and the two contradictory contexts in which its application has been upheld.

1. Introduction of the Doctrine: Young v. American Mini Theatres.

The secondary effects doctrine was first introduced in a footnote to the Supreme Court decision in *Young v. American Mini Theatres, Inc.*⁷¹ The regulation at issue in the case was an amendment to the City of Detroit’s “Anti-Skid Row Ordinance,” which set forth zoning limitations on adult businesses, mandating that no adult theater or bookstore be located within 1,000 feet of any other “regulated uses,”⁷² or within 500 feet of any residential area.⁷³ Two adult movie theaters challenged the amendments, arguing that these ordinances violated the First Amendment by targeting and restricting the protected speech conveyed in the films they displayed on the premises.⁷⁴ While the Sixth Circuit had found this argument convincing,⁷⁵ the Supreme Court did not – a plurality of the Court⁷⁶ concluded that the ordinance did not violate

⁶⁹ Lemley, *supra* note 67, at 192.

⁷⁰ See note 10, *supra*.

⁷¹ 427 U.S. 50, 71 n.34 (1976).

⁷² *Id.* at 72. “Regulated uses” included adult bookstores, liquor stores, motels, hotels, cabarets, pawnshops, pool halls, secondhand stores, public lodging houses, shoeshine parlors, and “taxi dance halls.” *Id.* at 52 n.3.

⁷³ *Id.* at 54.

⁷⁴ *Id.* at 56. The theaters also made a Fourteenth Amendment claim that the ordinance violated the Equal Protection clause because it targeted certain establishments based primarily on the content of the material those businesses displayed, *id.*, but this discussion is not relevant to the First Amendment concerns being focused on here and therefore is beyond the scope of this paper.

⁷⁵ *Am. Mini Theatres, Inc. v. Gribbs*, 518 F.2d 1014 (6th Cir. 1975) *rev’d*, 427 U.S. 50 (1976).

⁷⁶ Justice Stevens wrote for the plurality, and was joined in the opinion by Justices White, Rehnquist, Powell (excluding Part III), and Chief Justice Burger. See *Young*, 427 U.S. at 50.

the First Amendment because it did not directly regulate the content of the protected speech.⁷⁷

Indeed, the Court concluded that the zoning requirements had not been passed only to curtail offensive, but protected, expression but rather were motivated by “the city's interest in preserving the character of its neighborhoods.”⁷⁸ Justice Stevens denoted this concern as a governmental interest in the “secondary effects” of the protected speech:

The [city's] determination was that a concentration of “adult” movie theaters causes the area to deteriorate and become a focus of crime, effects which are not attributable to theaters showing other types of films. It is this secondary effect which these zoning ordinances attempt to avoid, not the dissemination of “offensive” speech.⁷⁹

Despite this language, the plurality in *Young* appears to have “frame[d] the secondary effects doctrine as an exception to the general rule against content discrimination,”⁸⁰ primarily basing its holding on the idea that pornography and similar speech may be a lower value type of speech – not wholly unprotected but nevertheless permissibly regulated because “the State may legitimately use the content of these materials as the basis for placing them in a different classification from other motion pictures.”⁸¹

Nevertheless, the wisdom of the secondary effects justification for treating a regulation as a content-neutral law, and thus as subject to lower scrutiny, was challenged from the start. In his vigorous dissent, Justice Stewart⁸² decried this “drastic departure from established principles of

⁷⁷ *Id.* at 58.

⁷⁸ *Id.* at 71.

⁷⁹ *Id.* at 71 n.34.

⁸⁰ *Fee, supra* note 65, at 302. Justice Powell in his concurrence appears to rely somewhat more heavily on a rationale similar to the secondary effects doctrine, finding the ordinances content-neutral because they were laws of general applicability, aimed at combating “the urban deterioration” that accompanied adult establishments, which only incidentally burdened free expression. *See id.* at 79 – 82 (Powell, J., concurring) (applying the *O'Brien* test).

⁸¹ *Young*, 427 U.S. at 70 – 71. Stevens further asserted that “it is manifest that society's interest in protecting this type of expression is of a wholly different, and lesser, magnitude than the interest in untrammelled political debate . . . few of us would march our sons and daughters off to war to preserve the citizen's right to see ‘Specified Sexual Activities’ exhibited in the theaters of our choice.” *Id.* at 70.

⁸² Justice Stewart was joined in dissent by Justices Brennan, Marshall, and Blackmun. *See Young*, 427 U.S. at 84 (Stewart, J., dissenting).

First Amendment law.”⁸³ Though “sympathetic . . . to the well-intentioned efforts of Detroit to ‘clean up’ its streets,” he emphasized that “it is in those instances where protected speech grates most unpleasantly against the sensibilities that judicial vigilance must be at its height.”⁸⁴ Justice Stewart concluded by pointing out that in the previous term, the Court had heard a case with many factual parallels,⁸⁵ but had rejected the city’s principal asserted interest in minimizing the “undesirable effects of speech having a particular content” as insufficient justification for restricting speech protected under the First Amendment.⁸⁶

2. *Solidification of the Doctrine: Renton v. Playtime Theatres.*

Notwithstanding the *Young* language endorsing a secondary effects approach, over the next ten years lower courts “consistently invalidated . . . zoning enactments, using the *O’Brien* four-prong analysis,” despite the fact that many of these enactments were “analytically indistinguishable from the ordinance upheld in *Young*.”⁸⁷ This resulted perhaps in part because lower federal courts had “trouble articulating a clear standard of review from the fractured *Young* decision.”⁸⁸ Although such confusion may have encouraged Justice Stewart to continue to hope that the *Young* decision was “an aberration,”⁸⁹ this soon proved not to be the case. A decade after *Young*, the Court revived and clarified the secondary effects doctrine, in a case called *Renton v. Playtime Theatres, Inc.*⁹⁰

⁸³ *Id.*

⁸⁴ *Id.* at 87.

⁸⁵ See *Erznoznik v. City of Jacksonville*, 422 U.S. 205 (1975) (holding that city cannot, consistent with the First and Fourteenth Amendments, make it a public nuisance for a drive-in movie theater to show films containing nudity simply because the screen is visible from a public place).

⁸⁶ *Young*, 427 U.S. at 87 (Stewart, J., dissenting).

⁸⁷ Ronald M. Stein, *Regulation of Adult Businesses Through Zoning After Renton*, 18 PAC. L.J. 351, 360 (1987).

⁸⁸ Andrew, *supra* note 7, at 1186; see also Stein, *supra* note 87, at 361 – 67 (discussing appeals court cases where decisions alluded to sorting through the multiple strands of decisions set forth in *Young*).

⁸⁹ *Young*, 427 U.S. at 87 (Stewart, J., dissenting).

⁹⁰ 475 U.S. 41 (1986).

The case involved a zoning ordinance enacted in the city of Renton, a township approximately twelve miles south of Seattle, Washington. Despite the fact that no adult businesses at that time yet existed in the city,⁹¹ the city council decided to enact a zoning ordinance dealing with such venues, stating that the locale was concerned about the possible blighting effects that such establishments could have on the greater community.⁹² In order to determine a course of action, the city council examined the experiences of neighboring Seattle, and of other cities, in particular relying on the “detailed findings” about adult establishments creating negative secondary effects summarized in a recent Washington state Supreme Court case.⁹³ After the ordinance was adopted, the company Playtime Theatres, Inc. purchased two existing theaters in the township, intending to show adult films in these establishments, and filed a lawsuit against the city challenging the zoning ordinance as unconstitutional under the First and Fourteenth Amendments.⁹⁴

The case made its way to the Supreme Court, where the majority held the ordinance valid.⁹⁵ Justice Rehnquist, asserting that the holding in the case was “largely dictated” by the decision set forth in *Young*,⁹⁶ emphasized that the restriction was properly evaluated as a time, place, and manner restriction rather than a content-based law because Renton’s “predominant concerns” in enacting the regulation were “with the secondary effects of adult theaters, and not

⁹¹ *Id.* at 43.

⁹² *Id.*

⁹³ *Id.* at 51. In the Washington Supreme Court case, *Northend Cinema, Inc. v. City of Seattle*, 90 Wash. 2d 709 (1978), the state court concluded that “the expert testimony” establishing that “the location of adult theaters has a harmful effect on the area and contribute to neighborhood blight, are supported by substantial evidence in the record” and thus upheld the city’s effort to only allow such businesses in a single designated zone as permissible under the secondary effects doctrine’s rationale. *Id.* at 51.

⁹⁴ *Renton*, 475 U.S. at 43.

⁹⁵ *Id.*

⁹⁶ *Id.* at 46.

with the content of adult films themselves.”⁹⁷ Thus, the Renton ordinance was “completely consistent with [the Court’s] definition of ‘content-neutral’ speech regulations as those that ‘are *justified* without reference to the content of the regulated speech’”⁹⁸ and warranted only intermediate scrutiny.⁹⁹

Applying this standard, the Court first found that Renton’s interest in regulating blight and other harmful secondary effects precipitated by the presence of adult businesses was a sufficiently substantial governmental interest to justify the regulation.¹⁰⁰ The city’s justifications for the ordinance in pursuit of this interest, furthermore, were not merely “conclusory and speculative,”¹⁰¹ as lower courts had indicated, instead the city had adequately based their regulations on evidence accrued from other cities:

The First Amendment does not require a city, before enacting such an ordinance, to conduct new studies or produce evidence independent of that already generated by other cities, so long as whatever evidence the city relies upon is reasonably believed to be relevant to the problem that the city addresses.¹⁰²

Additionally, the Court found “no constitutional defect in the method chosen by Renton to further its substantial interests” despite the fact that the city had taken a different regulatory approach than that in *Young*, noting that a city “must be allowed a reasonable opportunity to experiment with solutions to admittedly serious problems.”¹⁰³ Finally, the ordinance was deemed permissible because it still allowed individuals a “reasonable opportunity to open and

⁹⁷ *Id.* at 47.

⁹⁸ *Id.* (quoting *Virginia Pharmacy Board v. Virginia Citizens Consumer Council, Inc.*, 425 U.S. 748, 771 (1976)).

⁹⁹ *Id.* at 48.

¹⁰⁰ *Id.* (“[A] city’s ‘interest in attempting to preserve the quality of urban life is one that must be accorded the highest respect.’”) (citation omitted).

¹⁰¹ The Ninth Circuit had remanded the ordinance for reconsideration, indicating that it likely unconstitutionally violated the First Amendment. 748 F.2d 537 (9th Cir. 1984).

¹⁰² *Id.* at 51 – 52.

¹⁰³ *Id.* at 52 (quoting *Young v. Am. Mini Theatres, Inc.*, 427 U.S. 50, 71 (1976)).

operate an adult theater” and thus could not be considered an unconstitutional “substantial restriction” of expression.¹⁰⁴

Justice Brennan dissented from the majority’s reasoning.¹⁰⁵ He began by attacking the Court’s logic in classifying the ordinance, insisting that “[t]he fact that adult movie theaters may cause harmful ‘secondary’ land-use effects may arguably give Renton a compelling reason to regulate such establishments: it does not mean, however, that such regulations are content neutral.”¹⁰⁶ He implied that the legislative history of the regulation and its very terms strongly suggested that the city was motivated not by regulation of secondary effects, but “in discriminating against adult theaters based on the content of the films they exhibit.”¹⁰⁷ Thus, Justice Brennan indicated that the ordinance should appropriately be considered a content-based regulation, and analyzed under strict scrutiny review accordingly.

Moreover, the dissent took umbrage at the lack of a strong evidentiary record supporting the need for regulation of secondary effects¹⁰⁸ – taking care to underscore the fact that “[t]he City Council conducted no studies, and heard no expert testimony, on how the protected uses would be affected by the presence of an adult movie theater” – and thus deemed the city of Renton’s findings regarding the secondary effects caused by adult establishments “not ‘findings’ at all, but purely speculative conclusions” insufficient to justify the burdens the ordinance imposed on constitutionally protected expression.¹⁰⁹ He questioned the wisdom of the Court’s approval of turning to outside studies conducted in disanalogous locations, and advocated instead for a requirement of particularized evidence to the locale as evidentiary support sufficient to

¹⁰⁴ *Id.* at 53.

¹⁰⁵ *Id.* at 55 (Brennan, J., dissenting). Justice Brennan was joined by Justice Marshall.

¹⁰⁶ *Id.* at 56.

¹⁰⁷ *Id.* at 57.

¹⁰⁸ *Id.* at 60.

¹⁰⁹ *Id.*

justify regulation of protected expressive activity.¹¹⁰ Ultimately, Justice Brennan advocated for holding the ordinance an unconstitutional measure based on the city’s “illicit motives”¹¹¹ and on the fact that the resultant measures allowed Renton to “effectively ban a form of protected speech from its border” on what he viewed as extremely suspect evidence.¹¹²

3. *Criticism of the Secondary Effects Doctrine.*

As Justice Brennan and Justice Stewart’s spirited dissents foretold, the secondary effects doctrine has met with severe criticism from many scholarly quarters. Some legal commentators asserted that the *Renton* decision was an unwarranted and drastic expansion of the doctrine introduced in *Young*.¹¹³ Others feared that the doctrine masked approval of government censorship for disfavored speech.¹¹⁴ Many scholars believed that the secondary effects rationale confused already-complicated First Amendment jurisprudence,¹¹⁵ while social scientists debated about the sufficiency of the evidence that adult establishments even cause detrimental secondary effects in the first place, the premise upon which the doctrine is based.¹¹⁶

¹¹⁰ *Cf. id.* at 61 – 62 (“Renton cannot merely rely on the general experiences of Seattle or Detroit, for it must justify its ordinance in the context of *Renton*’s problems – not Seattle or Detroit’s problems.”) (citing lower court decision).

¹¹¹ *Id.*

¹¹² *Id.* at 65.

¹¹³ *See, e.g.,* Charles H. Clarke, *Freedom of Speech and the Problem of the Lawful Harmful Public Reaction: Adult Use Cases of Renton and Mini Theatres*, 20 AKRON L. REV. 187, 188 (1986) (“The severe adverse practical impact of *Renton* upon adult uses is much greater than might have been anticipated from *Young*. . . . [*Renton*] allows towns and small cities to virtually deny access [to adult materials] altogether.”); Yoshida, *supra* note 9, at 162 (“[*Renton*] undermined the protections afforded expression by applying a minimal standard of review based upon secondary effects in a further departure from the *Young* decision.”).

¹¹⁴ *E.g.* Hudson, *supra* note 10; William M. Sunkel, Note, *City of Renton v. Playtime Theatres, Inc.: Court-Approved Censorship Through Zoning?*, 7 PACE L. REV. 251, 251 (1986) (“[*Renton*] constitutes little more than tacit Court approval of governmental censorship through manipulation of a municipality’s zoning powers.”)

¹¹⁵ *E.g.* Clarke, *supra* note 113, at 191 (remarking that these decisions created “a considerable amount of confusion in the law of freedom of speech”).

¹¹⁶ Compare Byrant Paul & Daniel Linz, *Testing Assumption Made by the Supreme Court Concerning the Negative Secondary Effects of Adult Businesses: A Quasi-Experimental Approach*, INT’L COMM. ASS. CONFERENCE (2002) (concluding there is little difference in calls for police assistance in areas containing adult establishments versus areas without such establishments) with Alan C. Weinstein & Richard McCleary, *The Association of Adult Businesses with Secondary Effects: Legal Doctrine, Social Theory, and Empirical Evidence* (unpublished manuscript 2011), available at <http://ssrn.com/abstract=1950365> (finding that “methodologically appropriate studies

Despite the critical attention lavished upon the doctrine, very few commentators have examined the *practical* impact that the particular adult establishment zoning methods condoned by the Supreme Court have on the communities that adopt them, or have compared the effectiveness of the two primary methods that have emerged in the erogenous zoning context – consolidation of such establishments, and their dispersion.

D. The Erogenous Zoning Puzzle

As discussed in the previous section, two approaches for how to handle the problem of “erogenous zoning” have already been explicitly considered and approved as viable by the Supreme Court. In *Young*, the Court allowed Detroit to require that certain adult establishments not be permitted within 1,000 feet of another regulated establishment, or within 500 feet of a residential area.¹¹⁷ A decade later, the Court upheld a zoning ordinance in Renton, also on the grounds that such regulation of “secondary effects” was a permissible justification for burdening speech, but the solution proposed in that ordinance was markedly different – it promoted concentrating the establishments in one designated area rather than dispersing them.¹¹⁸ For ease of reference, this paper will borrow terms from gerrymandering literature¹¹⁹ and refer to the *Young* approach as “cracking” and the *Renton* approach as “packing.”

There are clearly tradeoffs that must occur for municipalities when they choose between the two approaches of cracking and packing to order their regulatory schemes, yet no scholarship

confirm criminological theory’s prediction that adult businesses are associated with heightened incidences of crime regardless of jurisdiction, business model or location correlation”).

¹¹⁷ *Young v. Am. Mini Theatres, Inc.*, 427 U.S. 50 (1976).

¹¹⁸ *Renton v. Playtime Theatres, Inc.*, 475 U.S. 41 (1986).

¹¹⁹ In the gerrymandering context, these approaches often refer to attempts by candidates or elected officials to dilute the votes of racial minorities. In that context, “[c]racking is the fragmentation or splitting of regions where racial minority groups are highly concentrated” while “packing is the placing of large regions of minority voting strength into single voting districts . . . to minimize the number of districted which might be affected by the minority voting strength.” Frank R. Parker, *The Mississippi Congressional Redistricting Case: A Case Study in Minority Vote Dilution*, 28 HOWARD L.J. 397, 399 n.13 (1985).

to date appears to have systematically examined these differences. Instead, nearly all literature discussing the erogenous zoning issue detail only the underlying constitutional logic of such decisions, rather than examine the practical impacts that the different approaches might bring to bear on the cities themselves after a zoning scheme has been adopted.¹²⁰ This omission is problematic, given that very underlying assumption of the secondary effects doctrine is that the regulations at issue have tangible and important impacts on the communities that have chosen to adopt them by working to mitigate or neutralize harm generators. As a consequence, any scholarship purporting to examine the doctrine ought to also be concerned with the practical effects that the different approaches validated by the Supreme Court have on the ground. It is to the question of which approach is superior that this paper now turns.

II. CRACKING VERSUS PACKING – THE MODERN LANDSCAPE

The first step to evaluating the merits of the cracking versus packing approaches is to understand what municipalities themselves think they are accomplishing when embracing one or the other type of zoning ordinance, and how they decide which method to pursue. As a consequence, a review of the modern landscape of erogenous zoning ordinances is an appropriate place to begin the inquiry into which approach may prove superior.

The best indicator of a municipality's reasoning and motivation is examination of its own self-published reports and studies, which accompany recommendations for zoning ordinances, and which detail the secondary effects that city planners believe attend the presence of adult establishments in their community. In order to detail the logic of these reports, this Part first determines what constitutes a representative sample of influential municipality reports and compiles basic information about the structure and content of these documents. Next, it closely

¹²⁰ See text accompanying notes 113 - 116, *supra*.

examines the various secondary effects that these reports highlight as justification for regulating SOBs, and evaluates the methodology used in the studies to provide factual findings of such effects. To conclude, this Part reviews the ultimate recommendations made by the preparers of these reports and compares the prevalence of advocating for the cracking versus the packing method.

A. *Means of Evaluation – Municipality Reports*

More than twenty-five years have passed since the Court’s decision in *Renton* made clear that either a cracking or packing zoning approach to regulating adult businesses could meet the standards of constitutionality. However, to date no law review article rigorously and systematically summarizes what city actions have prevailed in these intervening years or details the logic that cities utilize when endorsing one approach or the other as a means of regulating SOBs.¹²¹ This section identifies a representative universe of studies to evaluate in order to rectify this glaring hole in the literature and describes the basic key features of these reports.

Fortunately, most municipalities that have adopted erogenous zoning ordinances also commissioned studies or other such documents that lay out the city’s evidence of secondary effects and its subsequent reasoning. These reports are prevalent because evidence of factual findings is basically mandated for successful defense of an erogenous zoning ordinances, should it be challenged later in court. As the City Attorney for the City of Cleburne, Texas – a

¹²¹ While there is an article purporting to analyze a number of relevant municipal reports, it does so in order to question these studies’ ability to meet the standards of expert testimony and court admissibility as set forth in *Daubert v. Merrill Dow Pharm., Inc.*, 509 U.S. 579, 590 (1993), and does not focus upon the set of characteristics relevant to the erogenous zoning inquiry at issue in this paper. See generally Bryant Paul et al., *Government Regulation of “Adult” Businesses through Zoning and Anti-Nudity Ordinances: Debunking the Legal Myth of Negative Secondary Effects*, 6 COMM. L. & POL’Y 355, 368 – 70, 75 – 86 (2001) (arguing that application of *Daubert* standards “may force the courts to reject the studies previously relied upon as evidence of negative secondary effects,” *id.* at 391).

municipality that successfully adopted a dispersal ordinance for adult businesses – put it, from a city’s perspective “[t]he best defense . . . is a strong legislative record”:

The courts look to whether there is sufficient evidence in the record that the purpose of the ordinance is to lessen undesirable secondary effects. While some evidence of improper motives (such as a statement in the newspaper by a council member about how the immoral acts performed in such businesses wreck moral havoc on the town) is not enough to invalidate an ordinance, a clean, well-established legislative record is worth the effort when the SOB operator is crying to a district court jury about his constitutional rights.¹²²

Thus, most municipalities that have adopted erogenous zoning ordinances have been careful to create detailed records to support their assertions that either dispersal or concentration of adult establishments is justified by concerns about secondary effects. It is crucial to note at the outset that even these primary sources can be unreliable insofar as they are politically motivated documents that purport to make a “neutral” or “unbiased” evaluation while the communities for which they are prepared are clearly seeking a specific, predetermined course of action.¹²³

Despite these biases and drawbacks, the reports remain the best means of access to a municipality’s reasoning regarding which form of erogenous zoning to institute.

1. Determining the Relevant Set of Reports.

Identifying the appropriate sample of secondary effects studies to examine is a crucial preliminary step to conducting accurate and incisive analysis. To that end, I established a universe of reports based on information circulated by two diametrically opposed sets of

¹²² See, e.g., REGINA ATWELL, WHY AND HOW OUR CITY ORGANIZED A JOINT COUNTY-WIDE SEXUALLY ORIENTED BUSINESS TASK FORCE 1, 3 (1997).

¹²³ Many of the widely-cited studies contain language supporting the intuition that the planners carefully crafted their reports to meet certain legal criteria; for example, some reports go so far as to expressly disavow that public comments dealing with moral judgments on the material sold or services performed at adult establishments motivated the conclusions or report. See, e.g., *id.* (discussing importance of appearing to not have improper motives and to clearly lay out the secondary effects motivations in the record).

advocacy groups, each of which purported to identify a limited number of particularly influential and important secondary effects studies conducted by municipalities.

The first advocacy group, the National Law Center for Children and Families (NLC) is a non-profit organization that “work[s] in defending children and families across the nation.”¹²⁴ The grassroots organization Citizens for Community Values, which “exists to promote Judeo-Christian moral values, and to reduce destructive behaviors contrary to those values,”¹²⁵ and other similar organizations list the NLC as an expert contact that “can assist a legislative body in drafting its SOB legislation” and “specialize[s] in this area of law.”¹²⁶ In 2005, the NLC released summaries of forty-one SOB land use studies,¹²⁷ explaining briefly the broad contours of each report in the document, and highlighting the factual determinations of negative secondary effects asserted in each.¹²⁸

That same year, a document was published on behalf of two organizations representing businesspersons involved in the adult entertainment industry: The Association of Club Executives (ACE) and The Free Speech Coalition (FSC).¹²⁹ ACE, the trade association of America’s adult nightclubs, has as its mission “to provide and share information concerning the political and legal status of the adult nightclub industry and to provide a platform for the strategic

¹²⁴ National Law Center for Children and Families, *About Us*, available at <http://www.nationallawcenter.org/about-us/about-us.html>.

¹²⁵ Citizens for Community Values, *About Us*, available at <http://www.ccv.org/about-us/>.

¹²⁶ Citizens for Community Values, *What is an SOB?*, available at <http://www.ccv.org/issues/sex-oriented-businesses/what-is-an-sob/>.

¹²⁷ Although the NLC claims to summarize 43 reports in this document, it in fact erroneously reviews the same Adams County, Colorado study twice, and lists the Saint Paul, Minnesota study twice while only providing one summary pertaining to it. See NATIONAL LAW CENTER FOR CHILDREN AND FAMILIES, NLC SUMMARIES OF “SOB LAND USE” STUDIES: CRIME IMPACT STUDIES BY MUNICIPAL AND STATE GOVERNMENTS ON HARMFUL SECONDARY EFFECTS OF SEXUALLY-ORIENTED BUSINESSES 1 (2005).

¹²⁸ See generally *id.*

¹²⁹ ROBERT BRUCE McLAUGHLIN ET AL., SUMMARIZING AND EVALUATING STUDIES AND REPORTS THAT EXAMINE WHETHER ADULT ENTERTAINMENT BUSINESSES CAUSE ADVERSE SECONDARY EFFECTS (2005).

planning of initiatives to combat negative challenges.”¹³⁰ Similarly the FSC, the trade association for the adult entertainment industry, numbers among its responsibilities “be[ing] the watchdog for the adult entertainment industry guarding against unconstitutional and oppressive government intervention.”¹³¹ The document disseminated by the ACE and FSC summarized and criticized the findings in what it called the “core set of reports that ha[ve] been circulating around the country,”¹³² identifying twenty-eight studies as falling within this “core” group.¹³³

Combining the studies identified by NLC with those discussed by ACE and FSC resulted in a universe of forty-one total reports¹³⁴ – twenty-seven of which were cited by both sets of advocacy groups, thirteen that were highlighted by NLC only, and one that was highlighted by FSC and ACE only.¹³⁵ Each of the reports in this relevant universe was then carefully read and coded for specific characteristics – including methodological features, types of secondary effects analyzed, and which other reports were relied upon among other variables.

This approach has five key advantages that make it the most principled and effective way to examine the arguments utilized by municipalities seeking to regulate adult entertainment establishments through erogenous zoning ordinances. First, the method of using reports highlighted by the NLC and ACE/FSC is objective. Countless communities throughout the United States have adopted some form of erogenous zoning ordinance, and the reports underlying these ordinances vary widely – both in degree of availability and in content. Moreover, because such zoning ordinances are initiated and controlled by myriad local

¹³⁰ *Id.* at 2.

¹³¹ Free Speech Coalition, *Welcome Letter*, available at <http://freespeechcoalition.com/about-us.html>.

¹³² MCLAUGHLIN ET AL., *supra* note 129, at 7.

¹³³ *See id.* at 7 – 8. The publication additionally identified a number of “buried” studies that did not find that adult entertainment businesses created adverse effects, but admitted that these studies were rarely or never referenced or utilized by municipalities sponsoring SOB ordinances. *Id.* at 7. As a consequence, these “buried” studies were not included in the sample examined.

¹³⁴ I was unable to attain a copy of the 1986 Houston report listed by NLC, and thus it was omitted from the sample.

¹³⁵ To see the originator status and other basic characteristics of each report, see Appendix A.

government bodies,¹³⁶ correctly identifying the full universe of municipalities that have conducted secondary effects surveys is a difficult (if not impossible) endeavor. As a consequence, in the absence of set parameters to the report universe, the probability of unwittingly creating a sample that was both incomplete and skewed would be very high. Adhering to an objective approach to limiting the sample set ensures that the reports evaluated have a defensible unifying characteristic and are not included or excluded from the set simply due to happenstance.

Second, this approach ensures that the set of reports examined reflect a balanced viewpoint of which studies are in fact most important for municipalities relying on secondary effects rationales to justify erogenous zoning attempts. Both the NLC and the ACE/FSC publications reflect the viewpoints of extremely knowledgeable and biased organizations that are deeply committed to opposite sides of the adult entertainment regulation issue. These two groups, both acting out of self-interest, each endeavored to identify the most relevant municipal reports to date – one side in order to promote the findings asserted therein, and the other in order to debunk the methods utilized. Harnessing both of these organizations’ determinations of which reports are significant by combining their assessments creates an unbiased *universe* of studies to examine.

Third, using a universe established by reference to reports highlighted by knowledgeable organizations ensures that the most influential reports in the secondary effects field are captured for evaluation. Instead of determining a universe of reports guided by personal intuition about what kinds of evidence are widespread or convincing to municipalities, this approach establishes

¹³⁶ Cf. WILLIAM A. FISCHER, ZONING AND LAND USE REGULATION 407 (1999) (“[Z]oning is embedded in local government politics.”).

the relevant set of studies that ought to be examined through deference to outside expert opinion. Since disparate organizations with high investment in adult entertainment zoning highlighted many of the same studies as the core reports relevant to SOB land use regulation decisionmaking, and the other studies that they emphasized as prominent were coded in addition to this consensus group, one can be confident that the most relevant reports are included in the sample. Thus, one can better ensure that the most critical reports were adequately canvassed without resorting to guesswork.

Fourth, the resultant sample from this approach is extremely representative and thus an excellent indicator of the modern approach to erogenous zoning justification. These studies extend from 1977 to 2005, and additionally originate from nearly all regions of the country. As a result, examination of these reports can provide a national picture and also creates the potential to evaluate trends in secondary effects studies over time and across geographical boundaries within the nation. Furthermore, the sample includes cities of varying size and prominence, and that have varying degrees of adult entertainment presence. Thus, utilizing this approach permits evaluation of how a variety of external factors might influence municipality reasoning or decisionmaking when determining the ideal means of erogenous zoning.

Finally, and perhaps most importantly, this method created a manageable universe of studies, which is a prerequisite for close analysis of the current secondary effects landscape. Simply gathering a large number of reports would be fundamentally unhelpful, as it would be impracticable to comparatively evaluate each study in depth. Using a principled method to limit the universe of studies to forty-one reports allowed me to ensure that each report within the sample group was read carefully multiple times and meticulously coded, instead of merely

skimmed or given cursory examination. Consequently, the analysis performed on the secondary effects reports benefitted.

2. Basic Facts about the Reports.

The reports examined ranged from two to sixty-eight pages, with an average length of roughly twenty-seven pages.¹³⁷ About forty-six percent of all reports were composed by the relevant municipality's own Planning or Development Department,¹³⁸ while nearly twenty-two percent were authored by paid outside experts, fifteen percent by special committees or task forces organized for the express purpose of evaluating the question of SOB secondary effects, and twelve percent by community law enforcement officials. In the remaining five percent of reports there is no proper preparer or author, as the report itself is simply comprised of City Commission minutes from a particular public meeting where factual findings about the secondary effects of adult entertainment establishments were read into the record.¹³⁹ The studies originate from every region in the United States,¹⁴⁰ however the majority come from the South (forty-one percent), followed next in prevalence by the West (twenty-nine percent). Seventeen percent of the reports originate in the Midwest, and ten percent from the Northeast.¹⁴¹ Furthermore, all but one of the United States' nine geographical divisions – as defined by the United States Census Bureau – are represented in this sample of studies, with New England as

¹³⁷ Pages were determined with reference to a report's internal numbering system.

¹³⁸ This count of eighteen reports includes Seattle's study, which technically was authored by the city's Department of Construction and Land Use.

¹³⁹ See CITY OF ROME, GEORGIA, PRESENTATION MADE TO THE ROME CITY COMMISSION (1995); CITY OF LAS VEGAS, NEVADA, MINUTES ON PROHIBITING SEXUALLY ORIENTED BUSINESSES (1978).

¹⁴⁰ Regions determined in accordance with the U.S. CENSUS BUREAU, REGIONS AND DIVISIONS (2011), *available at* http://www.census.gov/geo/www/us_regdiv.pdf.

¹⁴¹ One report did not have a discernable point of origin, as it was written for a national organization and did not focus particularly on one region or state.

the excluded division.¹⁴² Appendix A provides a breakdown of the individual reports by region and division.

These documents were commissioned for a variety of reasons. Many municipalities prepared reports in order to provide a factual record supporting institution of drastic changes to the zoning code and widespread regulation of the location and prominence of sexually oriented businesses in the area.¹⁴³ These municipalities often claimed that existent adult establishments not yet regulated by land use controls were having a detrimental effect on the city overall, and that crafting zoning ordinances was a necessary precursor to mitigating these negative secondary effects. However, not all municipality studies examined had such drastic reform as their motivation. Some municipalities initiated a study prior to the existence or prevalence of adult businesses in the jurisdiction, in order to justify preemptive regulation of where such establishments might operate in the area in the future.¹⁴⁴ Others were prompted by a municipality's desire to amend or modify existent zoning rules pertaining to SOBs to make the regulations more strict or expansive.¹⁴⁵ A few municipalities appear to have commissioned reports after prior attempts at regulating adult businesses were struck down in court as being

¹⁴² See U.S. CENSUS BUREAU, *supra* note 140. Twelve reports are from the West South Central division, six reports are from the Pacific West division, five are from the South Atlantic, five from the Mountain West division, four from the East North Central division, four from the Middle Atlantic division, three from West North Central, and one is from East South Central.

¹⁴³ See, e.g., CITY OF INDIANAPOLIS, INDIANA, ADULT ENTERTAINMENT BUSINESSES IN INDIANAPOLIS – AN ANALYSIS (1984); CITY OF HOUSTON, TEXAS, COMMITTEE ON THE PROPOSED REGULATION OF SEXUALLY ORIENTED BUSINESSES: LEGISLATIVE REPORT (1983); CITY OF AMARILLO, TEXAS, A REPORT OF ZONING AND OTHER METHODS OF REGULATION ADULT ENTERTAINMENT IN AMARILLO (1977); CITY OF LOS ANGELES, CALIFORNIA, STUDY OF THE EFFECTS OF THE CONCENTRATION OF ADULT ENTERTAINMENT ESTABLISHMENTS (1977).

¹⁴⁴ See, e.g., GARY PALUMBO, TOWN AND VILLAGE OF ELICOTTVILLE CATTARAUGUS COUNTY, NEW YORK, ADULT BUSINESS STUDY (1998); ST. CROIX COUNTY, WISCONSIN, REGULATION OF ADULT ENTERTAINMENT ESTABLISHMENTS IN ST. CROIX COUNTY (1993); NEW HANOVER COUNTY, NORTH CAROLINA, REGULATION OF ADULT ENTERTAINMENT ESTABLISHMENTS IN NEW HANOVER COUNTY (1989).

¹⁴⁵ See, e.g., CITY OF SAINT PAUL, MINNESOTA, 1988 SUPPLEMENT TO ZONING STUDY (1988); CITY OF WHITTIER, CALIFORNIA, AMENDMENT TO ZONING REGULATIONS: ADULT BUSINESSES IN C-2 ZONE WITH CONDITIONAL USE PERMIT (1978).

inadequately supported by factual findings¹⁴⁶ or initiated studies explicitly in anticipation of pending litigation.¹⁴⁷

The majority of reports share a similar basic structure. They often open by asserting that the municipality has experienced a growth in the number of adult entertainment businesses in recent years, which has led to community objection.¹⁴⁸ For reports prepared preemptively, this initial assertion is likely to reference growth of SOBs in other municipalities or outline reasons why the community feels in danger of experiencing similar growth in its jurisdiction in the near future.¹⁴⁹ Many reports then either state that other municipalities have determined that negative secondary effects accompany a prevalence of such businesses¹⁵⁰ or review the legal requirements for controlling adult entertainment businesses by summarizing *Renton*, *Young*, and other relevant court precedent.¹⁵¹ Regardless of structure, nearly all reports at some point provide an outline of the legal bases for using zoning and land use controls as a means for regulating adult establishments before discussing the details of whatever study the municipality has conducted. Next, most reports acknowledge that there are two common approaches to regulation that communities utilize, and briefly detail the distinctive features of packing and cracking zoning ordinances¹⁵²; sometimes the concentration method is referenced as the “Boston Model” due to the fact that Boston prominently created a concentrated area for adult businesses called the

¹⁴⁶ See, e.g., CITY OF AUSTIN, TEXAS, EFFECTS OF ADULT ENTERTAINMENT BUSINESSES ON RESIDENTIAL NEIGHBORHOODS (1986).

¹⁴⁷ See, e.g., EFFINGHAM COUNTY, ILLINOIS, REPORT OF RICHARD MCCLEARY, PH.D (2005).

¹⁴⁸ See, e.g., CITY OF NEW YORK, NEW YORK, ADULT ENTERTAINMENT STUDY i (1994) (discussing the “recent proliferation” of adult entertainment businesses in New York City over the past decade).

¹⁴⁹ See, e.g., PALUMBO, *supra* note 144, at 1 – 2 (detailing Ellicottville’s status as a tourism-driven community as means of explaining why preemptive regulation of adult entertainment establishments is justifiable).

¹⁵⁰ See, e.g., CITY OF DENVER, COLORADO, A REPORT ON THE SECONDARY IMPACTS OF ADULT USE BUSINESSES IN THE CITY OF DENVER 3 – 6 (1998) (reviewing secondary effects studies conducted by other jurisdictions).

¹⁵¹ See, e.g., RICHARD MCCLEARY & JAMES W. MEEKER, FINAL REPORT TO THE CITY OF GARDEN GROVE: THE RELATIONSHIP BETWEEN CRIME AND ADULT BUSINESS OPERATIONS ON GARDEN GROVE BOULEVARD 7 – 17 (1991).

¹⁵² See, e.g., CITY OF BELLEVUE, WASHINGTON, A STUDY ON THE NEED TO REGULATE THE LOCATION OF ADULT ENTERTAINMENT USES 12 – 14 (1987).

“Combat Zone” that garnered national attention while the dispersion method is referenced as the “Detroit Model” in allusion to the ordinance upheld in *Renton*.¹⁵³ After these preliminary steps, reports then begin examining the state of their own community for evidence of secondary effects; thorough discussion of the methodology utilized and of the impacts examined by these studies is reserved for Part II.B, *infra*. Nearly universally, reports conclude by asserting that the municipality’s inquiry revealed that negative secondary effects do indeed accompany presence of SOBs in the area, and by recommending a zoning ordinance that modifies or enhances the current regulation of such establishments.

Municipalities typically employ one of two popular definitions of “adult oriented businesses” when conducting their evaluation of secondary effects, which determines the number and types of businesses included in the study. The most prevalent definition denotes an establishment as “adult oriented” by reference to the nature and content of the materials or services that the business offers.¹⁵⁴ Commonly, this definition classifies businesses carrying products or services involving “specified sexual activities” and/or portraying “specified anatomical areas” as adult.¹⁵⁵ These two terms of art appear to have fairly standardized definitions across the nation:

“Specified sexual activities” has been defined as encompassing “(1) Human genitals in a state of sexual stimulation or arousal; (2) Acts of human masturbation, sexual intercourse, or sodomy; (3) Fondling or other erotic touching of human genitals, public region, buttock or female breast” while “[s]pecified anatomical areas” includes “(1) Less than completely and opaquely covered: (a) Human genitals, public region, (b) Buttock, or (c)

¹⁵³ See, e.g., MANATEE COUNTY, FLORIDA, ADULT ENTERTAINMENT BUSINESS STUDY FOR MANATEE COUNTY 6 – 8 (1987).

¹⁵⁴ E.g., THE CITY OF LOS ANGELES, CALIFORNIA, *supra* note 143, at 7 (“The term ‘adult entertainment’ is a general term utilized by the Planning staff to collectively refer to businesses which primarily engage in the sale of material depicting sex or in providing certain sexual services.”).

¹⁵⁵ See, e.g., ROBERT W. THORPE, DES MOINES ADULT USE STUDY (1987).

Female breast below a point immediately above the top of the areola; or (2) Human male genitals in a discernibly turgid state, even if completely and opaquely covered.¹⁵⁶

The other popular definition of adult use establishment differentiates these businesses from others by denoting all businesses catering to “situations where minors, by virtue of age, are excluded from the premises” adult.¹⁵⁷ Importantly, adoption of this second, less prevalent definition of adult use means that all alcohol-serving establishments – even those selling products or services devoid of sexual content – are included in the sample of adult uses examined for secondary effects by the municipality.¹⁵⁸

In the sample of reports studied in this paper, a large number did not make any discernable attempt to clarify which of the two common definitions of adult business was being used. These were thus classified as having ‘unclear definitions.’ One study examined only businesses “self-identifying” as adult,¹⁵⁹ which I also classified as ‘unclear’ rather than under either definition, as it is impossible to determine how a self-identifying adult business would decide to adopt that moniker. Additionally, a small number of reports incorporated both definitions,¹⁶⁰ but because this essentially makes the nature of the material or services provided by the establishment the primary *limitation* on the set of businesses classified as adult, such definitions properly should be considered simply a minor variation on the more popular content-

¹⁵⁶ “E.g., Land Use Code, Seattle, Definitions, Section 23.84.030 in CITY OF SEATTLE, WASHINGTON, DIRECTOR’S REPORT: PROPOSED LAND USE CODE TEXT AMENDMENT 27 (1989).

¹⁵⁷ E.g. CITY OF BEAUMONT, TEXAS, REGULATION OF ADULT USES: REVISED 1 (1982)

¹⁵⁸ See, e.g., MARLA MCPHERSON & GLENN SILLOWAY, AN ANALYSIS OF THE RELATIONSHIP BETWEEN ADULT ENTERTAINMENT ESTABLISHMENTS, CRIME, AND HOUSING VALUE 37 (1980) (“In this study ‘Adult entertainment establishments’ include all types of alcohol serving establishments, plus businesses which commercialize sex – saunas, ‘adult’ theaters and bookstores, rap parlors, and arcades.”).

¹⁵⁹ CITY OF NEW YORK, *supra* note 148, at 1 (“For purposes of the DCP survey, and adult entertainment establishment is a commercial use that defines itself as such through exterior signs or other advertisements.”). Although it is likely that this classification de facto captures only businesses offering sexual materials or services, I did not want to generalize from intuition so simply coded this study’s definition as “unclear.” Additionally, the self-identification aspect of the definition has the potential to be dramatically underinclusive, given that many establishments selling sexually focused materials or services might not self-identify via signage as adult.

¹⁶⁰ Cf. PALUMBO, *supra* note 144, at i; CITY OF WHITTIER, *supra* note 145, at 17.

based definition. The remaining studies unambiguously adopted one of the two primary definitions.¹⁶¹ The general breakdown of definitions used in the universe of studies examined is as follows:

Table 1: Adult Business Defined		
<i>Content of Materials/Services Offered</i>	<i>Exclusion of Minors by Reason of Age</i>	<i>Unclear Features</i>
19 (46%)	5 (12%)	17 (41%)

Finally, it is worth noting that a basic feature of many of the reports studied for this paper is that these documents do not exclusively discuss zoning measures as manners of regulating or constraining SOBs. Most municipalities supplement their erogenous zoning scheme with licensing or permit requirements for adult business owners or employees, and as a consequence these measures were often also examined or recommended in the studies.¹⁶² Furthermore, some cities embrace an approach that also includes “active law enforcement, sign regulations and/or nuisance provisions” on top of zoning and licensing schemes, so these methods commonly also are evaluated.¹⁶³ However, because these methods of regulation do not have implications for the erogenous zoning approaches of packing or cracking, their discussion and analysis is beyond the scope of this paper.

B. Secondary Effects Examined

Municipality studies examine any number of community problems as potentially resulting from the presence of adult oriented businesses in their jurisdiction. In cases scrutinizing erogenous zoning regulations, townships have purported to be concerned with myriad secondary effects of SOBs, including:

¹⁶¹ See Appendix B for a list of which studies fall into each category.

¹⁶² See, e.g., CITY OF DENVER, *supra* note 150, at 20 – 23.

¹⁶³ See, e.g., ST. CROIX COUNTY, *supra* note 144, at 7 – 8 (discussing these approaches).

increased criminal activity, prostitution, residential privacy, visual clutter, interference with ingress and egress, traffic congestion, noise, security problems, appearances of impropriety, employment discrimination, economic vitality in business districts, property values, preserving the educational appearance of a college dormitory, preventing blockbusting, maintaining public order, equal employment opportunities, street crime associated with panhandling, negative effects of gambling, competition in the video programming market, congestion at the polls and confusion for election officials tabulating votes, delay and interference with voters, sexual arousal of readers, signal bleed, and harm to children.¹⁶⁴

Indeed, a variety of these and other secondary effects were asserted as accompanying adult business establishments in the reports examined: a smattering of reports highlighted such effects as “public resentment,”¹⁶⁵ increased traffic congestion,¹⁶⁶ a decline in morals or community character,¹⁶⁷ the attraction of transients,¹⁶⁸ or a rise public health or drug concerns¹⁶⁹ as attending the presence of adult establishments.

Despite the proliferation of possible secondary effects that might conceivably be asserted, three kinds of secondary effects receive an overwhelming amount of attention in municipality studies – crime, negative impacts on property values, and blight/noise.¹⁷⁰ All but one report purported to establish that crime was a secondary effect of adult oriented businesses;¹⁷¹ greater than three quarters identified a negative effect on surrounding property value as an impact of

¹⁶⁴ See Hudson, *supra* note 10, at 77 – 78 (citing cases).

¹⁶⁵ Twelve studies cited this effect as a concern. See, e.g., CITY OF LOS ANGELES, *supra* note 143.

¹⁶⁶ About ten studies identified increased traffic as a negative secondary effect. E.g., THORPE, *supra* note 155 (noting this as a concern for Des Moines residents).

¹⁶⁷ While a large number of reports impliedly had moral concerns as motivation, roughly eight overtly identified this moral decay as a secondary effect motivating zoning of adult establishments. E.g., CITY OF WHITTIER, *supra* note 145.

¹⁶⁸ E.g., CITY OF SEATTLE, *supra* note 156.

¹⁶⁹ About nine reports refer to an increased problem with public health and/or drug use as accompanying the presence of an adult establishment. E.g. INSIGHT ASSOCIATES, REPORT ON THE SECONDARY EFFECTS OF THE CONCENTRATION OF ADULT USE ESTABLISHMENTS IN THE TIMES SQUARE AREA (1994).

¹⁷⁰ To see which jurisdictions claimed each of these secondary effects, please see Appendix C.

¹⁷¹ Notably, the report that is an exception to this trend is meant to be supplemental to crime findings already asserted by the municipality. See generally CITY OF HOUSTON, TEXAS, COMMITTEE LEGISLATIVE REPORT ON PROPOSED AMENDMENTS TO ARTICLE III OF CHAPTER 28 OF THE CODE OF ORDINANCES (SEXUALLY ORIENTED BUSINESSES) (1991).

SOBs; and more than fifty percent listed blight or noise as a significant secondary effect.¹⁷²

Because municipalities appear particularly concerned with these three areas, this section examines the three secondary effects typically highlighted in municipality reports at length, in an attempt to examine and evaluate the strength of municipality reasoning for adopting erogenous zoning regimes.

1. Crime.

Without a doubt, municipalities most frequently cite increases in criminal activity in areas containing sexually oriented businesses as the primary justification for regulation of these establishments. Cities typically use a limited number of methodological approaches, often in combination, to obtain evidence that criminal activity is a negative secondary effect of adult businesses. The most prevalent tools relied upon in the reports examined were public testimony from citizens, statements from law enforcement personnel, statistical data in a study/control area comparison, and the incorporation of findings of other municipalities to show that crime and sexually oriented businesses are positively correlated.

(a) *Public Testimony.* — Nearly a quarter of all reports partially base their findings of higher criminal activity in proximity to adult establishments on observations, complaints, and other statements made by citizens at public hearings that are sponsored by the municipality.¹⁷³

This public testimony typically consists of anecdotal evidence asserted by residents of the area

¹⁷² I coded a report as referencing ‘blight or noise’ as a secondary effect if the language of the reports used either of those terms to refer to visual or audible neighborhood deterioration. A large number of reports additionally list complaints about the signage utilized by adult businesses, but because they do so in a variety of contexts, I limited the ‘blight’ category to this fairly semantic classification in order to reduce subjectivity in the analysis. Thus, this category of coding may be underinclusive.

¹⁷³ See generally CITY OF LOS ANGELES, *supra* note 143; CITY OF LAS VEGAS, *supra* note 139; CITY OF HOUSTON, *supra* note 143; THORPE, *supra* note 155; CITY OF BELLEVUE, *supra* note 152; CITY OF SEATTLE, *supra* note 156; STATE OF MINNESOTA, REPORT OF THE ATTORNEY GENERAL’S WORKING GROUP ON THE REGULATION OF SEXUALLY ORIENTED BUSINESSES (1989); INSIGHT ASSOCIATES, *supra* note 169; CITY OF NEW YORK, *supra* note 148; ATWELL, *supra* note 122.

that they believe that crime is a problem accompanying adult businesses in various neighborhoods, and is often expressed in terms of “fear of walking in areas where adult entertainment and related businesses are concentrated” or concern for populations perceived as vulnerable (such as children, women, and the elderly) being targeted by muggers and being verbally or physically accosted.¹⁷⁴ Typically reports that include reference to public testimony as evidence of higher crime levels couple this approach with at least one of the latter three methodologies here discussed.

(b) *Law Enforcement Statements.* — Thirty-nine percent of municipalities include the testimony of a law enforcement official as part of their evidence that adult business establishments lead to higher incidence of crime.¹⁷⁵ Frequently, law enforcement testimony includes reference both to well-known, specific incidents of crime in the community that occurred in close proximity to sexually oriented businesses and to such sources of information as “[k]nowledge gained from our routine investigation indicat[ing] a very close relationship between many types of crimes” and exposure to sexually oriented businesses.¹⁷⁶

(c) *Statistical Comparison.* — Only thirty-nine percent of the reports examined contained any attempt at statistical analysis of local crime data. Of this subset of reports, nearly

¹⁷⁴ See, e.g., CITY OF LOS ANGELES, *supra* note 143, at 27 – 29.

¹⁷⁵ See generally CITY OF LOS ANGELES, *supra* note 143; CARL I. DELAU, SMUT SHOP OUTLETS, CONTRIBUTION OF THOSE OUTLETS T THE INCREASED CRIME RATE IN THE CENSUS TRACT AREAS OF THE SMUT SHOPS (1977); CITY OF WHITTIER *supra* note 145; CITY OF LAS VEGAS, *supra* note 139; CITY OF PHOENIX, ARIZONA, ADULT BUSINESS STUDY 8 (1979); CITY OF BEAUMONT, *supra* note 157; CITY OF HOUSTON, *supra* note 143; THORPE, *supra* note 155; STATE OF MINNESOTA, *supra* note 173; MICHAEL J. LEVERENZ, ADULT ENTERTAINMENT ORDINANCE MEMORANDUM (1990) (pertaining to Tucson, Arizona); J.J. LONG, ADAMS COUNTY NUDE ENTERTAINMENT STUDY (1991); JON STEPHEN GUSTIN, QUALITY OF LIFE: A LOOK AT SUCCESSFUL ABATEMENT OF ADULT ORIENTED BUSINESS NUISANCES IN OKLAHOMA CITY, OKLAHOMA (1992); CITY OF ROME, *supra* note 139; ED WASSMAN & DAR HENDRICKSON, DIGEST OF RESEARCH: EVIDENCE OF RELATIONSHIPS BETWEEN ADULT-ORIENTED BUSINESSES AND COMMUNITY CRIME AND DISORDER (1996) (pertaining to Saint Mary’s Georgia); CITY OF HOUSTON, TEXAS, SEXUALLY ORIENTED BUSINESS ORDINANCE REVISION COMMITTEE LEGISLATIVE REPORTS (1997); CITY OF DENVER, *supra* note 150.

¹⁷⁶ See DELAU, *supra* note 175, at 1 – 2 (recounting specific murders and rapes in Cleveland).

all performed some form of study/control area based comparison. This approach requires matching areas containing adult businesses with areas of equal size that (ideally) have similar land use, property value, and population characteristics but do not contain adult establishments, and then comparing the crime data obtained from the control area with that from the study area to see if locations containing the adult business variable suffer higher crime as a consequence.¹⁷⁷ The crime data examined in these control/study statistical comparisons is far from uniform across municipalities – some cities prefer to utilize local crime data about the crime rate,¹⁷⁸ others examine the difference in the number of calls to police for service,¹⁷⁹ and a small number perform both analyses.¹⁸⁰ Typically, municipalities performing a control/study statistical analysis purport to find evidence that an increase in crime is a negative secondary effect of adult businesses, though the degree to which this is asserted is very inconsistent across jurisdictions.¹⁸¹

(d) *Other Municipalities' Findings.* — The final way municipalities offer evidence that an increase in crime is a negative secondary effect of adult businesses is by incorporating, referencing, or adopting the findings of other municipalities to this effect. Greater than sixty-three percent of reports rely on other municipalities' conclusions, making this approach by far the most commonly used means of proof. Indeed, of the reports citing to other studies as a

¹⁷⁷ Cf. CITY OF EL PASO, EFFECTS OF ADULT ENTERTAINMENT BUSINESSES ON RESIDENTIAL NEIGHBORHOODS 7 – 14 (1986) (describing efforts to match control and study areas based on demographic and land use classifications).

¹⁷⁸ E.g., CITY OF AMARILLO, *supra* note 143. While the manner of collection, compilation, and analysis of local crime data that goes into calculating a local crime rate generally varies from jurisdiction to jurisdiction, within any individual report the methodology for such figures is consistent.

¹⁷⁹ E.g., INSIGHT ASSOCIATES, *supra* note 169 (Times Square comparisons).

¹⁸⁰ E.g., PETER MALIN, AN ANALYSIS OF THE EFFECTS OF SOBS ON THE SURROUNDING NEIGHBORHOODS IN DALLAS, TEXAS (1997).

¹⁸¹ Compare CITY OF INDIANAPOLIS, *supra* note 143, at 9 (claiming the crime rate was 21% higher in study areas for major crimes) with CITY OF PHOENIX, *supra* note 175 (finding “about the same rate of violent crimes per 1,000 persons in the Study Areas as compared to the Control areas”); compare INSIGHT ASSOCIATES, *supra* note 169, at 32 (finding “there is very definitely a pointed difference in the number of crime complaints between . . . study blocks and their controls”) with CITY OF DENVER, *supra* note 150, at 33 (claiming that “the percentage of calls for police service linked to disturbance, prowler and sex-related crimes was roughly the same in the areas surrounding adult businesses as for the city as a whole”).

means of proof of secondary effects, nearly twenty-seven percent relied *solely* on the findings of these other cities to support their assertion that crime accompanies the presence of sexually oriented businesses.¹⁸²

(e) *Flaws of Approaches*. — It is imperative to recognize that each of the approaches to proving that crime is a negative secondary effect of adult businesses discussed above has significant methodological flaws that somewhat impugn the credibility of claims about this secondary effect. First, the testimony of public citizens provides only impressionistic assertions that crime in fact is of increased concern in areas containing adult establishments; as a consequence, this source of “evidence” ought to be viewed skeptically as it consists chiefly of empirical claims unsupported by fact or rigorous evaluation, and further is often made by parties with a vested interest in removing sexually oriented establishments from the area due to moralistic or personal biases.¹⁸³ Similarly, while the testimony of experienced law enforcement officials ought to be given more weight than that of inexperienced citizens, this manner of proof continues to be fairly suspect, again because of its reliance on intuition and anecdotal evidence rather than on methodical analysis.¹⁸⁴ Thus, the fact that a large number of reports rely solely on such anecdotal and unreliable forms of evidence rather than utilizing an empirics-based approach should cast the conclusions of these municipalities into serious doubt.

¹⁸² See CITY OF ISLIP, NEW YORK, STUDY & RECOMMENDATION FOR ADULT ENTERTAINMENT IN THE TOWN OF ISLIP (1980); MANATEE COUNTY, *supra* note 153; CITY OF SAINT PAUL, *supra* note 145; NEW HANOVER COUNTY, *supra* note 144; ST. CROIX COUNTY, *supra* note 144; PETER HECHT, REPORT TO THE AMERICAN CENTER FOR LAW AND JUSTICE ON THE SECONDARY IMPACTS OF SEX ORIENTED BUSINESS (1996); PALUMBO, *supra* note 144.

¹⁸³ For example, in many public hearings the primary speakers are leaders of religious-based organizations that likely offer testimony because they have strong objections to the morality of the sexually oriented business’s operation rather than because they truly believe that an increase in crime has occurred in the area. See, e.g., CITY OF LAS VEGAS, *supra* note 139, at 3 – 4 (recounting testimony by Executive Director of Christians Coalition simultaneously relaying crime and morality concerns).

¹⁸⁴ For example, one report penned by a law enforcement official baldly asserts that “Pornography entrepreneurs, Pimps, and Adult Business related promoters relocated to Oklahoma City from across the nation to compete for their share of huge profits to be made” without providing any outside evidence whatsoever. See GUSTIN, *supra* note 175, at 2.

Moreover, a number of scholars have argued that the control/study statistical methodology utilized in many of these reports as an empirical basis for finding negative secondary effects is unsound.¹⁸⁵ In *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, the Supreme Court set forth basic requirements that must be met in order for scientific evidence to be accepted as credible and admissible in legal proceedings.¹⁸⁶ Some commentators have asserted that the statistical data produced in municipality reports fail to meet these criteria, and thus question the validity of municipality reliance on the evidence obtained from such approaches.¹⁸⁷ Undeniably, it is clear that some reports utilize poorly matched control and study areas,¹⁸⁸ which may dramatically influence findings, while others examined data collected over only a very short period of time¹⁸⁹ or used data with inconsistent features within the same comparison,¹⁹⁰ casting further doubt on the robustness of the findings produced. Thus, to the extent that the empirical claims asserted by municipalities are discerned via these flawed approaches,¹⁹¹ the conclusions they support in terms of erogenous zoning are questionable.

Finally, evidence ascertained by reliance on other municipality findings is only as good as the quality of the prior report cited, which makes this methodology also somewhat unreliable as a convincing means of proof. Although courts affirmatively allow cities to justify erogenous

¹⁸⁵ E.g., Paul et al., *supra* note 121, at 367 – 370 (“With few exceptions, the methods most frequently used in these studies are seriously and often fatally flawed”).

¹⁸⁶ 509 U.S. 579 (1993).

¹⁸⁷ Cf. Paul et al., *supra* note 121, at 371 (“[T]he calculation of an error rate and adherence to professional standards in using techniques or procedures need to be applied to these studies in order to ensure ‘evidentiary reliability.’”).

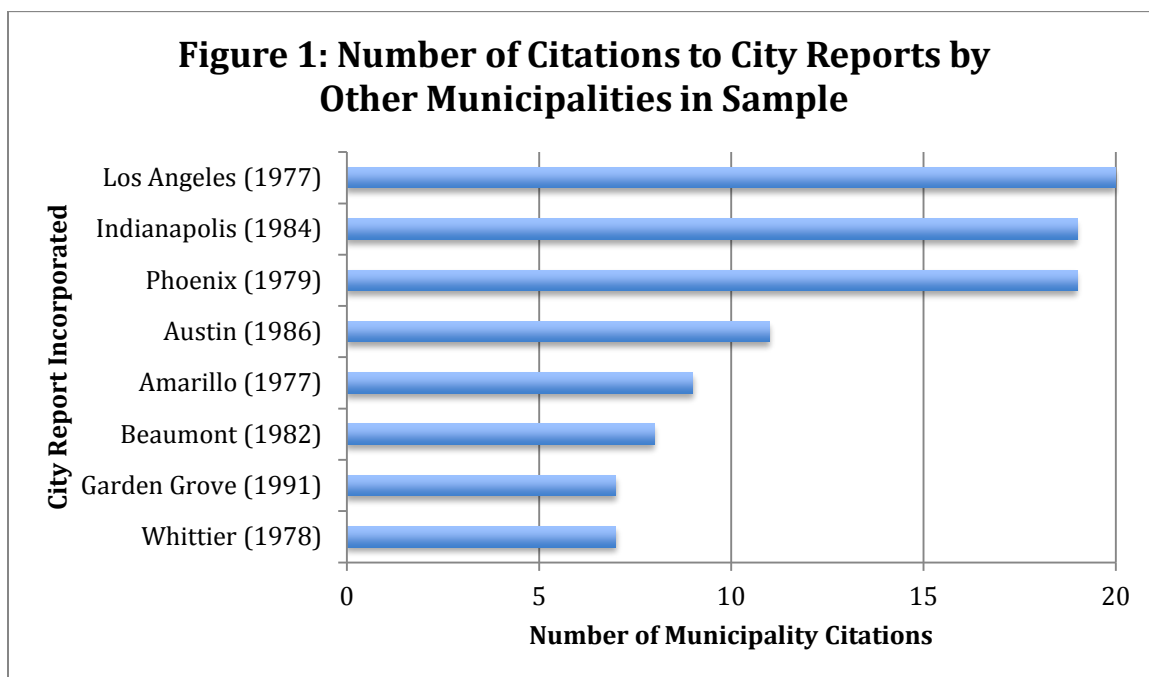
¹⁸⁸ E.g. CITY OF INDIANAPOLIS, *supra* note 143, at 1 – 5 (describing the study areas and the control areas, revealing that study areas tended to be much more densely populated and had less zoning mix than their matched control areas).

¹⁸⁹ Cf., e.g. CITY OF AUSTIN, *supra* note 146, at 10 (“The data collected represents calls to the Austin Police Department from January 1, 1984 through December 31, 1985.”).

¹⁹⁰ Cf. CITY OF LOS ANGELES, *supra* note 143, at 55 (“During the period included in this report, the Citywide deployment of police personnel rose by 21.2 percent.”).

¹⁹¹ Some commentators assert that “with few exceptions” nearly all such studies are seriously flawed, see Paul et al., *supra* note 121, at 386.

zoning by incorporating or adopting other cities’ findings of negative secondary effects attendant to adult businesses,¹⁹² this approach creates a echo chamber effect across municipalities seeking to regulate adult entertainment establishments as the findings of potentially flawed studies are replicated or adopted across localities.¹⁹³ Further exacerbating this effect is the fact that in the sample size examined – which is already comprised only of reports considered influential and important¹⁹⁴ – a relatively small number of reports appear to be disproportionately relied upon by other municipalities:



This trend means that only a few studies, conducted primarily in the late 1970s and early 1980s, have disproportionately shaped the rationale of cities pursuing a plan of erogenous zoning.

¹⁹² See *City of Renton v. Playtime Theaters, Inc.*, 475 U.S. 41, 51 – 52 (1986) (“The First Amendment does not require a city, before enacting such an [erogenous zoning] ordinance, to conduct new studies or produce evidence independent of that already generated by other cities, so long as whatever evidence the city relies upon is reasonably believed to be relevant to the problem that the city addresses.”).

¹⁹³ Cf. Paul et al., *supra* note 121, at 366 (“This problem [of flawed evidence] is further compounded when courts allow previous studies, conducted in other cities, to supplant data collected in the city where the ordinance is being proposed.”).

¹⁹⁴ See *supra* text accompanying notes 126 – 136.

Another issue with cities basing their findings of secondary effects largely upon the evidence presented already by other municipalities that is worth noting is that courts do not require the adopted findings relied upon by the municipality to originate from a city of comparable size, demographics, etc.¹⁹⁵ This means that evidence of negative secondary effects found in one specific context are oftentimes also ascribed, perhaps erroneously, to an environment where a very different lived experience occurs.¹⁹⁶ Lastly, when a municipality summarizes another location’s findings, there is always some danger that the evidence recounted has been taken out of context or oversimplified, thus adding another element of unreliability. Thus, reports relying primarily on other localities’ findings and evidence should be treated with a fair amount of skepticism.

2. *Real Estate Devaluation.*

The second most common secondary effect that municipalities cite as justification for regulation of adult businesses is adjacent residential and commercial property value depreciation. Over seventy-five percent of the reports evaluated named this economic effect as a strong reason to regulate the location of sexually oriented businesses in the municipality. Cities typically utilize five basic methodologies to provide evidence of this property value decline – public testimony, “expert” testimony from realtors or real estate appraisers, questionnaires and survey data, study/control statistical analysis, and reliance on other reports. Each approach will be described briefly in turn.

¹⁹⁵ *Cf. Renton*, 475 U.S. at 61 (Brennan, J., dissenting) (expressing doubt at majority’s implication that “Renton was concerned with the same problems as Seattle and Detroit” and therefore “entitled to rely on the experiences of [those] cities”).

¹⁹⁶ For example, the town and city of Ellicottville is self-described as a “small community in rural western New York . . . [w]ith a year-round population of approximately 1,600 . . . [and] a large (and growing second home population.” PALUMBO, *supra* note 144, at 1. Nevertheless, this township justified its erogenous zoning measures in part by reference to secondary effects found in much larger and more diverse cities, such as Phoenix, Indianapolis, and Austin. At the time the evaluation was conducted, Ellicottville had no adult businesses in its areas. *Id.*

(a) *Public Testimony.* — About thirty-four percent of all reports base findings of decreased property value in proximity to adult establishments partially on observations, complaints, and other statements made by citizens at public hearings.¹⁹⁷ Citizens at these hearings make such assertions about adult establishments as “because of the proximity to an area of this type . . . I was unable to rent available space – first quality space – for a period of at least two years,” claim that customers are scared away,¹⁹⁸ and also vaguely maintain that adult businesses hurt adjacent businesses by generally creating a “negative economic climate.”¹⁹⁹

(b) *Real Estate Expert Statements.* — A small number of reports utilize “expert” testimony from a realtor or appraiser to bolster claims that adult businesses harm nearby property values.²⁰⁰ Often these opinions were solicited by the entity conducting the secondary effects study, and the method used for obtaining such input was informal interview²⁰¹; as a result, I consider expert opinion a methodological approach distinct from the questionnaire/survey response category due to its increased opacity and its non-uniformity. Experts consulted in this manner typically concluded that adult businesses “may result in a reduction of property values and/or rental income stream” for nearby properties.²⁰²

¹⁹⁷ CITY OF LOS ANGELES, *supra* note 143; CITY OF AMARILLO, *supra* note 143; CITY OF WHITTIER, *supra* note 145; CITY OF LAS VEGAS, *supra* note 139; CITY OF PHOENIX, *supra* note 175; CITY OF HOUSTON, *supra* note 143; THORPE, *supra* note 155; CITY OF BELLEVUE, *supra* note 152; CITY OF SEATTLE, *supra* note 156; STATE OF MINNESOTA, *supra* note 173; CITY OF HOUSTON, *supra* note 171; INSIGHT ASSOCIATES, *supra* note 169; CITY OF NEWPORT NEWS, *supra* note 203; ATWELL, *supra* note 122.

¹⁹⁸ CITY OF LAS VEGAS, *supra* note 139, at 2.

¹⁹⁹ INSIGHT ASSOCIATES, *supra* note 169, at 48.

²⁰⁰ CITY OF LOS ANGELES, *supra* note 143; CITY OF LAS VEGAS, *supra* note 139; CITY OF HOUSTON, *supra* note 143; THORPE, *supra* note 155; INSIGHT ASSOCIATES, *supra* note 169; HAMILTON COUNTY, TENNESSEE, COMMUNITY PROTECTION COMMITTEE’S FINAL REPORT ON VICE IN HAMILTON COUNTY WITH RECOMMENDATIONS (1997).

²⁰¹ *E.g.*, THORPE, *supra* note 155, at 17 (referencing his “discussion with some seven real estate appraisers” as partially forming the basis of report’s conclusions about the economic impact of adult businesses).

²⁰² *Id.*; *see also* INSIGHT ASSOCIATES, *supra* note 169, at 38 (“Three real estate developers . . . all asserted that the presence of such stores had a definitely negative effect on office leasing, especially for corporate tenants.”).

(c) *Survey Data.* — Over a third of reports claiming to find evidence of negative secondary effects in the form of property value impacts utilize the survey opinions of different area populations as proof of this effect.²⁰³ Although all of these surveys are conducted via questionnaire, they vary significantly across jurisdiction in nearly every other respect. First, different municipalities seek the opinions of different populations when conducting these surveys. While nearly all cities surveyed real estate professionals – such as appraisers, real estate agents, or real estate lenders – some additionally questioned property owners in the jurisdiction generally,²⁰⁴ members of bodies with specialized expertise about property issues,²⁰⁵ or the subset of business and residential property owners residing near sexually oriented businesses.²⁰⁶ Second, the size of the area focused upon in the surveys conducted is variable. Indianapolis, for example, conducted national polling by targeting a random sample of members of the American Institute of Real Estate Appraisers²⁰⁷ while Austin pursued a regional approach, mailing its questionnaire to “120 firms listed in the Southwestern Bell Yellow Pages under ‘real estate appraisers’ and ‘real estate lenders’”²⁰⁸ and Dallas focused only on real estate representatives involved with properties in the designated study and control areas identified by the report.²⁰⁹ Third, the surveys conducted in the reports examined do not have uniform sample

²⁰³ CITY OF LOS ANGELES, *supra* note 143; CITY OF LAS VEGAS, *supra* note 139; CITY OF INDIANAPOLIS, *supra* note 143; CITY OF OKLAHOMA CITY, OKLAHOMA, ADULT ENTERTAINMENT BUSINESSES IN OKLAHOMA CITY: A SURVEY OF REA; ESTATE APPRAISERS (1986); CITY OF AUSTIN, *supra* note 146; CITY OF EL PASO, *supra* note 177; MCCLEARY & MEEKER, *supra* note 151; INSIGHT ASSOCIATES, *supra* note 169; CITY OF NEW YORK, *supra* note 148; CITY OF NEWPORT NEWS, VIRGINIA, ADULT USE STUDY (1996); MALIN, *supra* note 180; CITY OF DENVER, *supra* note 150.

²⁰⁴ CITY OF LAS VEGAS, *supra* note 139; CITY OF EL PASO, *supra* note 177; CITY OF NEW YORK, *supra* note 148; CITY OF DENVER, *supra* note 150.

²⁰⁵ See CITY OF NEWPORT NEWS, *supra* note 203.

²⁰⁶ See CITY OF LOS ANGELES, *supra* note 143; CITY OF LAS VEGAS, *supra* note 139; CITY OF EL PASO, *supra* note 177; MCCLEARY & MEEKER, *supra* note 151; INSIGHT ASSOCIATES, *supra* note 169; MALIN, *supra* note 180.

²⁰⁷ See CITY OF INDIANAPOLIS, *supra* note 143.

²⁰⁸ CITY OF AUSTIN, *supra* note 146, at 34.

²⁰⁹ See MALIN, *supra* note 180.

size. For example, Los Angeles appears to have conducted the largest survey – sending questionnaires to 3,600 non-residential property owners living within a 500 foot radius of each of five study areas containing adult businesses, and receiving replies from 581 of these persons, as well as to 400 members of the American Institute of Real Estate Appraisers living in Los Angeles, and receiving 81 responses.²¹⁰ In contrast, Newport News, Virginia engaged in a much more restrained survey effort, sending 38 questionnaires to members of the Virginia Peninsula Association of Realtor’s Board of Directors and Governmental Affairs Committee and receiving only 14 responses.²¹¹ Finally, the percentage response rate to individual questionnaires within the surveys range from as low as 13.5%²¹² to as high as 100%.²¹³

Despite these differences, most surveys purport to find similar evidence of secondary effects in the form of declining property values due to the presence of adult businesses. Nearly all parties surveyed perceive sexually oriented businesses as problematic for property values and rental opportunities in nearby areas,²¹⁴ but assert that these negative effects diminish with increasing distance from the adult establishment.²¹⁵ Another impact sometimes highlighted in the surveys was an increase in turnover rates for nearby properties when an adult business is present.²¹⁶

(d) *Statistical Comparison.* — Only twenty-eight percent of all reports citing property

²¹⁰ See CITY OF LOS ANGELES, *supra* note 143, at 32.

²¹¹ See CITY OF NEWPORT NEWS, *supra* note 203.

²¹² See MCCLEARY & MEEKER, *supra* note 151 (900 surveys sent to real estate professionals, with only 122 returned).

²¹³ See CITY OF NEW YORK, *supra* note 148 (all of the community liaisons or beat officers for each of the six study areas responded to the questionnaire sent).

²¹⁴ E.g. CITY OF EL PASO, *supra* note 177, at 14 (recounting that 53% of appraisers surveyed believed that sexually oriented businesses had a negative effect on residential property values and 47% believed they depressed commercial property values).

²¹⁵ E.g. CITY OF AUSTIN, *supra* note 146, at 35 (relaying that the majority of professionals surveyed believed that the severity of the negative effects on property value declined with distance).

²¹⁶ E.g. CITY OF NEW YORK, *supra* note 148.

value decline as a negative secondary effect of adult businesses conduct an empirical statistical analysis in order to provide evidence of this effect.²¹⁷ All performed some form of study/control area comparison.²¹⁸ Municipalities examined varying kinds of local data when conducting these analyses: some compared the ability to lease or sell properties in the study versus the control areas,²¹⁹ others examined the comparative assessment in the market value *change* in each area over time,²²⁰ some focused on turnover rate of the respective properties,²²¹ and some used census data to determine differences in housing value.²²² Most study/control evaluations purported to find a correlation between the presence of adult establishments and lower housing value and rental desirability or higher turnover rate.²²³ However, many reports concede that this correlation is fairly weak,²²⁴ and at least one indicated that it was impossible to prove a causal relationship (i.e. that these economic impacts resulted from the presence of adult businesses, rather than that adult businesses located purposefully in places where these attributes were

²¹⁷ CITY OF LOS ANGELES, *supra* note 143; CITY OF WHITTIER, *supra* note 145; MCPHERSON & SILLOWAY, *supra* note 158; CITY OF INDIANAPOLIS, *supra* note 143; THORPE, *supra* note 155; INSIGHT ASSOCIATES, *supra* note 169; CITY OF NEW YORK, *supra* note 148; MALIN, *supra* note 180; CITY OF DENVER, *supra* note 150.

²¹⁸ For a description of this methodology see text accompanying note 177.

²¹⁹ CITY OF WHITTIER, *supra* note 145; CITY OF INDIANAPOLIS, *supra* note 143.

²²⁰ CITY OF LOS ANGELES, *supra* note 143; CITY OF WHITTIER, *supra* note 145; CITY OF INDIANAPOLIS, *supra* note 143; INSIGHT ASSOCIATES, *supra* note 169; CITY OF NEW YORK, *supra* note 148; CITY OF HOUSTON, *supra* note 175; CITY OF DENVER, *supra* note 150.

²²¹ CITY OF WHITTIER, *supra* note 145; CITY OF INDIANAPOLIS, *supra* note 143; THORPE, *supra* note 155.

²²² MCPHERSON & SILLOWAY, *supra* note 158; CITY OF INDIANAPOLIS, *supra* note 143.

²²³ *E.g.* CITY OF INDIANAPOLIS, *supra* note 143, at 32 (“[T]he available data indicate that twice the expected number of houses were placed on the market at substantially lower prices than would be expected had the Study Area real estate market performed typically for the period of time in question.”); CITY OF DENVER, *supra* note 150, at 54 (“Based on both commercial and residential values data from 1994 – 1997, properties abutting or adjoining the adult business indicate a loss in value.”).

²²⁴ *See, e.g.*, CITY OF NEW YORK, *supra* note 148, at 65 (“Comparisons of percentage changes in assessed valuations between 1986 and 1992 for the study areas, survey and control blockfronts, community district, and borough, did not reveal any significant relationship.”); MCPHERSON & SILLOWAY, *supra* note 158, at 65 (“[A]dult entertainment establishments do not appear to have a very strong relationship to changes in housing value when other variables are taken into account. Although housing value is negatively associated with adult businesses, these coefficients are statistically insignificant, and therefore no conclusions should be drawn.”); CITY OF DENVER, *supra* note 150, at 54 (“Analysis of values for commercial blocks in close proximity to the adult business blocks was inconclusive.”).

already present).²²⁵

(e) *Other Municipalities' Findings.* — Greater than sixty-five percent of all reports listing property value impacts as a negative secondary effect of adult businesses referenced or incorporated the findings of other municipalities in order to support its claims, again making this approach the most common form of evidence offered.²²⁶ Over a third of these reports rely solely on the findings of other jurisdictions to support their claims that negative economic impact was a secondary effect of adult businesses.²²⁷

(f) *Flaws of Approaches.* — Again, these methodological approaches each have elements that are problematic.²²⁸ The public and expert testimony continues to be anecdotal and obtained through haphazard means, and thus are somewhat unreliable sources of proof for empirical claims²²⁹ while the problems identified above regarding the study/control analyses and the incorporation of other reports are equally valid in the context of proving property value decline as they are in the context of proving crime increases.²³⁰ Likewise, the survey methodology that appears to frequently be employed by municipalities to provide evidence of the secondary effect of lowered property values is rife with its own problems.

²²⁵ Cf. MCPHERSON & SILLOWAY, *supra* note 158, at 70 (“[T]he general character of the neighborhood is responsible for both housing values and concentrations of adult establishments.”). See also CITY OF LOS ANGELES, *supra* note 143, at 25 – 26 (“[In] the staff’s opinion, there would appear to be insufficient evidence to support the contention that concentrations of sex oriented businesses have been the primary cause of these patterns of change in assessed valuations between 1970 and 1976.”) (emphasis in original).

²²⁶ CITY OF LOS ANGELES, *supra* note 143; CITY OF ISLIP, *supra* note 182; CITY OF BEAUMONT, *supra* note 157; CITY OF HOUSTON, *supra* note 143; CITY OF EL PASO, *supra* note 177; THORPE, *supra* note 155; MANATEE COUNTY, *supra* note 153; CITY OF BELLEVUE, *supra* note 152; CITY OF SAINT PAUL, *supra* note 145; CITY OF SEATTLE, *supra* note 156; NEW HANOVER COUNTY, *supra* note 144; STATE OF MINNESOTA, *supra* note 173; ST. CROIX COUNTY, *supra* note 144; INSIGHT ASSOCIATES, *supra* note 169; CITY OF NEW YORK, *supra* note 148; CITY OF NEWPORT NEWS, *supra* note 203; HECHT, *supra* note 182; MALIN, *supra* note 180; ATWELL, *supra* note 122; PALUMBO, *supra* note 144; CITY OF DENVER, *supra* note 150.

²²⁷ CITY OF ISLIP, *supra* note 182; CITY OF BEAUMONT, *supra* note 157; MANATEE COUNTY, *supra* note 153; CITY OF SAINT PAUL, *supra* note 145; NEW HANOVER COUNTY, *supra* note 144; ST. CROIX COUNTY, *supra* note 144; HECHT, *supra* note 182; PALUMBO, *supra* note 144.

²²⁸ See *supra* text accompanying notes 183 – 196.

²²⁹ See *supra* text accompanying notes 183 – 184.

²³⁰ See *supra* text accompanying notes 185 – 196.

Firstly, although real estate professionals are likely to have expertise and knowledge about the impact of adult establishments on surrounding properties, “they have a particularly strong interest in the issue and as such, may produce biased results” when surveyed for their opinion on such matters.²³¹ Similar biases are even more likely to influence the survey results obtained from local residents and businessowners. As a result, while the survey format provides a big picture impressionistic view of the issue of the economic impacts of adult businesses on adjacent property, it ultimately is of little better caliber than anecdotal evidence. Secondly, many of the surveys conducted by municipalities fail to meet the three main professional standards set for performing methodologically valid social scientific survey research:

First, it is important to ensure that a random sample of potential respondents is included in the study. Second, a sufficient response rate must be reached, and those who do respond must not be a biased sub-portion of the sample. Finally, there must be a sufficient number of respondents to provide a stable statistical estimate.²³²

These standards are designed to ensure that survey results are reflective of the viewpoint of the questioned demographic, and intended to ensure that the survey research “possesses some degree of reliability and trustworthiness.”²³³ However, many of the reports examined fail to meet one or more of these criteria: many questionnaires were sent to a non-random, potentially biased sample²³⁴; suffered from an extremely low response rate²³⁵; or only successfully interviewed an extremely small number of respondents.²³⁶ Thus, to the extent that these surveys are

²³¹ Paul et al., *supra* note 121, at 374.

²³² *See id.* (paraphrasing EARL BABBIE, *THE PRACTICE OF SOCIAL RESEARCH* 176 – 82 (8th ed. 1998)).

²³³ *Id.*

²³⁴ *E.g.* MCCLEARY & MEEKER, *supra* note 151, at 5 (questioning 250 “random” households, including 200 addresses located within 1500 feet of an adult business); MALIN, *supra* note 180, at 4 (questionnaires sent only to real estate brokers or property owners active in areas punctuated by sexually-oriented businesses). *But see* CITY OF INDIANAPOLIS, *supra* note 143, at 33 (questionnaire sent to Appraisers Institute members practicing in twenty- two Metropolitan Statistical Areas of a size similar to Indianapolis, as defined by the U.S. Bureau of the Census).

²³⁵ *See supra* note 212.

²³⁶ *E.g.* CITY OF OKLAHOMA CITY, *supra* note 203, at 4 – 5 (based data off responses from only thirty-four individuals).

methodologically unsound, the conclusions asserted in reliance upon these findings should be partially discounted for having an unreliable evidentiary foundation.

3. *Blight and Noise.*

Blight and noise is the third most identified negative secondary effect asserted by municipalities seeking to explain the rationale motivating their erogenous zoning schemes. Slightly more than half of all the reports examined specifically highlighted these forms of “neighborhood deterioration” as a category distinct from the economic impact on property values effect.²³⁷ Three approaches to providing evidence of this effect predominate: use of public testimony or written concerns, conducting individual site analysis, and reliance upon other reports.

(a) *Public Testimony.* — The most common source of evidence that municipalities rely upon in proving this effect is public testimony or written complaint about the blighting effects these establishments have on surrounding areas. Of reports claiming blight or noise as a distinct category of secondary effect, greater than forty-five percent utilize this approach²³⁸ and of this subset more than a third relies solely upon such testimony. Citizens commonly asserted a number of quality-of-life impacts, “such as littering, noise, . . . [and] offensive signage”²³⁹ or an abundance of “weeds, graffiti, and trash”²⁴⁰ when discussing blighting effects of adult businesses on surrounding areas.

²³⁷ Notably, many reports appear to couple these two categories – for instance, many of the property value questionnaire responses list the blighting effect of adult businesses as a reason property values are lowered. *E.g.*, CITY OF LOS ANGELES, *supra* note 143, at 36. As a consequence, it may be that the methodology employed in this paper underrepresents the extent to which municipalities highlight blight as a concern.

²³⁸ CITY OF LOS ANGELES, *supra* note 143; CITY OF AMARILLO, *supra* note 143; CITY OF WHITTIER, *supra* note 145; CITY OF LAS VEGAS, *supra* note 139; CITY OF PHOENIX, *supra* note 175; CITY OF BEAUMONT, *supra* note 157; CITY OF OKLAHOMA CITY, *supra* note 203; THORPE, *supra* note 155; CITY OF SEATTLE, *supra* note 156; STATE OF MINNESOTA, *supra* note 173; STATE OF MINNESOTA, *supra* note 173; CITY OF NEW YORK, *supra* note 148.

²³⁹ *E.g.* CITY OF NEW YORK, *supra* note 148, at 40 (recounting testimony from public hearing).

²⁴⁰ *E.g.* CITY OF DENVER, *supra* note 150, at 28.

(b) *Individual Site Analysis.* — Five municipalities undertook a case study approach where areas surrounding individual adult establishment locations were examined for blighting impacts.²⁴¹ Under this approach, either “representative locations” containing adult businesses are periodically checked²⁴² or members of the Planning Department made “several visits . . . to each of the sites” of adult establishments in order to record perceived blighting problems noted at each site.²⁴³ Typically this approach yields mixed findings, with some locations marked as being extremely deteriorated and others showing only minimal such effects.²⁴⁴ This methodology is extremely subjective, and often no attempt is made to compare the blight allegedly found at case study locations with that found at comparable control locations. As a consequence, this methodology should be treated skeptically.

(c) *Other Municipalities’ Findings.* — Finally, greater than forty-two percent of reports claiming blight or noise as a discrete secondary effect support this assertion in part through reference to the findings of other municipalities.²⁴⁵ Seven reports rely solely on this approach to justify assertions about blight.

C. *Cracking Versus Packing*

Most reports concluded by advocating for an erogenous zoning scheme that would regulate the location of adult establishments, although about nineteen percent of the studies did

²⁴¹ See CITY OF ISLIP, *supra* note 182; CITY OF HOUSTON, *supra* note 143; THORPE, *supra* note 155; LONG, *supra* note 175; CITY OF DENVER, *supra* note 150.

²⁴² See LONG, *supra* note 175, at 2 (relaying the approach of Adams County).

²⁴³ E.g. CITY OF ISLIP, *supra* note 182; CITY OF DENVER, *supra* note 150, at 30 – 31.

²⁴⁴ E.g. CITY OF ISLIP, *supra* note 182 (finding some locations unproblematic while documenting many deterioration effects at others).

²⁴⁵ CITY OF BELLEVUE, *supra* note 152; NEW HANOVER COUNTY, *supra* note 144; STATE OF MINNESOTA, *supra* note 173; ST. CROIX COUNTY, *supra* note 144; INSIGHT ASSOCIATES, *supra* note 169; CITY OF NEW YORK, *supra* note 148; HECHT, *supra* note 182; MALIN, *supra* note 180; PALUMBO, *supra* note 144; CITY OF DENVER, *supra* note 150.

not make a specific recommendation as to the form such a zoning scheme ought to take.²⁴⁶ All but one of the reports in the universe examined making a specific recommendation advocated for the dispersal, or cracking, approach over the concentration, or packing, approach. The city of Seattle constituted the only outlier.²⁴⁷

It is important to note that many cracking recommendations often also advocate for limiting adult businesses to certain kinds of zoned areas (for example, allowing sexually oriented businesses only large commercial zones) in addition to setting minimum distance requirements between such establishments.²⁴⁸ However, for purposes of present study, it is sufficient to note that this approach nevertheless can be characterized *primarily* as cracking, because it does not promote concentrating adult business establishments closely in a specific area and highlights the benefits of separating businesses from one another as the primary means of mitigating their perceived negative secondary effects. The dispersal ordinances recommended are fairly uniform across jurisdictions. Most proposals call for separation of adult businesses from other adult uses, as well as advocate distance requirements from churches, schools, parks, daycare facilities and residential zones.²⁴⁹

²⁴⁶ DELAU, *supra* note 175; LEVERENZ, *supra* note 175; GUSTIN, *supra* note 175; CITY OF ROME, *supra* note 139; HECHT, *supra* note 182; WASSMAN & HENDRICKSON, *supra* note 175; ATWELL, *supra* note 122; CITY OF DENVER, *supra* note 150.

²⁴⁷ *Cf.* CITY OF SEATTLE, *supra* note 156, at 10 (“In order to protect the health, safety and general welfare of the residential, commercial, and industrial neighborhoods, adult cabarets are most compatible in areas where other adult entertainment uses are located and where their impacts on the surrounding area can be more closely monitored.”). Newport News, Virginia arguably also did not strictly advocate for the cracking approach, as the municipality’s report “encourages dispersal of adult uses, except for downtown where concentrations would be permitted.” CITY OF NEWPORT NEWS, *supra* note 203, at 3. However, because most of the report’s conclusions focus on the benefits of dispersal, I classified this report as predominately advocating for the cracking method. *See generally id.*

²⁴⁸ *E.g.*, MCPHERSON & SILLOWAY, *supra* note 158, at 82; CITY OF AUSTIN, *supra* note 146, at 38 – 39.

²⁴⁹ Typically minimum distance requirements between adult businesses and other specified uses range from as little as 250 feet separation to as much as 2000 feet. *Compare* PALUMBO, *supra* note 144 (recommending that the town adopt a requirement that adult businesses maintain 250 foot separation from residential uses) *with* ST. CROIX COUNTY, *supra* note 144 (recommending that adult uses be required to locate no less than 2000 feet away from any school, park, playground, library, church, or daycare).

Ultimately, a thorough review of municipality reports reveals that cities' erogenous zoning rationales are justified largely by reference to scant and flawed sources of evidence purporting to show that crime, property devaluation, and blight are significant secondary effects that accompany the presence of adult establishments in the community. This evidence in turn appears to lead to the nearly uniform conclusion that a cracking approach is the desired method for abatement of these societal ills.

III. WHY CONSENSUS DOES NOT EQUAL CORRECTNESS

As Part II reveals, municipalities have largely adopted cracking as their erogenous zoning scheme of choice in the twenty-five years since the Court in *Renton* stated that either a cracking or packing approach could be constitutionally justified.²⁵⁰ However, as should also be apparent from the above discussion, the evidence that cities utilize to justify this decision is seriously flawed. As a consequence, there are myriad reasons to doubt that the mere fact that a consensus appears to have emerged across jurisdictions means that the cracking approach is in fact the superior means to maximizing overall social welfare.

Indeed, there are many reasons to suspect that cities adopt erogenous zoning schemes due to motivations that are largely divorced from pursuit of goal of increasing utility. This Part proceeds by first exploring a few rationales that are irrelevant to long term efficiency or welfare maximization assessments and instead place undue weight on minimizing short term, one-time transactional costs; these rationales may account for the pervasiveness of the cracking approach across jurisdictions. Next, employing a law and economics framework, the paper highlights possible advantages that may result from utilization of the packing approach that no municipality

²⁵⁰ See *City of Renton v. Playtime Theatres, Inc.*, 475 U.S. 41, 52 (1986) (“Cities may regulate adult theaters by dispersing them, as in Detroit, or by effectively concentrating them, as in Renton.”).

has yet provided sufficient efficiency or welfare-based reasons to reject when indicating a preference for the cracking approach.

A. Low Transaction Costs May Unduly Influence Municipalities

1. Ease of Justification.

As has already been shown, one of the primary ways that municipalities justify their erogenous zoning schemes is by referencing and adopting other cities' claims about finding that negative secondary effects accompany the presence of adult businesses in its jurisdiction.²⁵¹ Similarly, many municipalities also self-consciously model their erogenous zoning ordinances off of those adopted already by other jurisdictions.²⁵² For a city, modeling regulations off those of other municipalities whose erogenous zoning schemes have already been legally upheld strongly increases the probability that the derivative regulation scheme will similarly be viewed as sufficiently justified by a court of law. This is because the older regulation essentially provides a blueprint of acceptable restriction that informs the kind or degree of restrictions imposed in the newly crafted ordinance.

Thus, the more municipalities create zoning schemes based in the cracking approach to regulating adult businesses, the easier it becomes for later cities interested in erogenous zoning to do the same, through simply co-opting these other jurisdictions' earlier findings and aping the terms of their legally-valid ordinances. The upshot is that the respective popularity of the cracking approach over the packing approach may have less to do with the relative merits of each method to zoning, resulting instead from the fact that it is relatively simpler to adopt wholesale

²⁵¹ *See supra* text accompanying note 182.

²⁵² *E.g.* MANATEE COUNTY, *supra* note 153.

the findings and solutions of numerous other jurisdictions than it is to craft one's own zoning regulation scheme outside of this mold.

The extreme homogeneity of zoning ordinance recommendations discerned when examining the report universe created for this project lends credibility to the notion that this kind of replication process occurs across jurisdictions creating erogenous zoning schemes. While it might be mere coincidence that nearly all dispersal ordinances examined typically recommended minimum separation requirements of between 500 and 1000 feet for adult businesses from other regulated uses, schools, churches, parks, libraries and residential zones, this kind of spontaneous homogeneity seems fairly improbable – particularly given the fact that these fairly uniform recommendations have surfaced in jurisdictions that are geographically and demographically diverse.²⁵³ Moreover, the extensive reliance on other jurisdictions' findings already evident in reports increases the probability that this influence does not end with incorporation of conclusions about secondary effects.²⁵⁴

A final feature of municipality secondary effects reports that bolsters the conclusion that a cracking approach might be being chosen over the packing approach for reasons of expediency rather than because it is objectively preferable is the surprising fact that most reports make little attempt to discuss the comparative advantages of one erogenous zoning scheme over the other when proffering recommendations to curtail the negative secondary effects of adult businesses. Although nearly all reports acknowledge that there are two distinct approaches to erogenous zoning that have been upheld by the judiciary and briefly summarize these inapposite

²⁵³ See generally *supra* text accompanying notes 248 - 249.

²⁵⁴ Cf. ATWELL, *supra* note 122, at 7 (noting that some judges have required municipalities to “have the actual studies, not just the ordinance, before them” when claiming reliance on the other city's findings and using them to craft a zoning ordinance).

schemes,²⁵⁵ most jurisdictions end all discussion of the packing approach there.²⁵⁶ In fact, of the reports examined, only three engaged in any form of serious evaluation of the merits of *both* the cracking and packing approaches before deciding that a dispersal method was preferable given their jurisdiction's needs.²⁵⁷ The dearth of independent evaluation about the relative merits of cracking versus cracking indicates that perhaps shortcuts in decisionmaking were used by most cities.

2. *Political Catering to Moral Objections.*

Another non-efficiency or overall welfare based reason that may have led many cities to adopt a cracking erogenous zoning scheme without seriously contemplating the packing approach is the potential for political backlash that can accompany creation of a special area for concentration of adult businesses. For example, in discussing another municipality's experience, the Manatee County Planning Department cautions that:

[E]ven after the planning advisory committee reviewed alternative regulatory measures and recommended to the council the concentrated approach, the council became politically susceptible to accusation of condoning sex businesses when considering approving concentration. The political realities such accusations [sic.] are an obvious deterrent for decision-makers consider [sic.] in contemplating the concentration of adult entertainment businesses.²⁵⁸

Similarly, the town of Islip's report indicated that the municipality had been leaning towards a plan that would have pursued a packing approach, until the New York Times published an article that garnered national attention asserting that Islip was planning to create a "Pornography Zone."²⁵⁹ This article led to a "public response [that] was overwhelmingly negative" based

²⁵⁵ See *supra* text accompanying notes 152 - 153.

²⁵⁶ E.g. CITY OF PHOENIX, *supra* note 175.

²⁵⁷ CITY OF HOUSTON, *supra* note 143; CITY OF AMARILLO, *supra* note 143; MANATEE COUNTY, *supra* note 153.

²⁵⁸ MANATEE COUNTY, *supra* note 153, at 7 (discussing the city of Fayetteville, North Carolina's erogenous zoning experience).

²⁵⁹ CITY OF ISLIP, *supra* note 182, at 5.

primarily in moral objections to such an area, and halted any further serious consideration of instituting the packing approach.²⁶⁰

However, by the very logic of the secondary effects doctrine, such considerations should not properly enter into the erogenous zoning calculus: if the goals animating adult business regulations truly are unconcerned with eliminating the content of the speech offered by these establishments, a perception that a zoning scheme “condone[s] sex businesses” should be irrelevant to the approach that the municipality ultimately adopts since (theoretically at least) the regulations ought not be aimed at purposely burdening these businesses themselves, but instead directed at mitigating the negative secondary effects that accompany such enterprises. Ultimately then, both the cracking and stacking approaches in a sense “condone sex businesses” as they must provide means for these protected speech establishments to operate and cannot call for their outright ban in the municipality. Thus, political pressure to adopt one form of ordinance over the other only reflects a misunderstanding on the part of residents about the permissible function of erogenous zoning ordinances and ought not be treated as a dispositive reflection of truly optimal social welfare considerations once these speech protection objectives are also properly taken into account.

Nevertheless, it appears that city planners do consider the potential for political backlash a salient factor when devising their erogenous zoning schemes, and indeed may allow this concern to strongly influence their decisionmaking process when discussing potential ordinances to regulate adult establishments.²⁶¹ This suggests that cracking might not be the overall most efficient way to reduce secondary effects, but instead simply the approach that in the short term

²⁶⁰ *Id.*

²⁶¹ *Cf. e.g.,* MANATEE COUNTY, *supra* note 153, at 7 – 9.

has the fewest political costs for public officials. Although costs to public officials may properly be evaluated as one transaction cost measure to be considered in deciding which erogenous zoning scheme maximizes overall social utility, it ought not be so overriding a factor as it appears to have been treated in many municipalities.

B. Efficiency-Based Reasons to Prefer the Packing Approach

Aside from the fact that much of the underlying evidence that purportedly supports the cracking approach is questionable, and the problem that numerous factors of dubious long term relevance can explain the relative popularity of the cracking approach over the packing approach, there is another reason to believe that consensus about adopting a scheme of adult business dispersal ought not automatically suggest that that method of erogenous zoning is superior: namely, there are significant efficiency-based and utility-maximizing attributes of a packing approach that continue to go unacknowledged by most jurisdictions. As a consequence, it may well be the case that the advantages of the packing method of erogenous zoning remain underappreciated by cities rather than that cracking is logically the better approach.

This section briefly discusses three potential advantages to the packing approach in turn, in order to underscore areas where the lesser-utilized method yields possible benefits to which cities do not appear sufficiently attendant.

1. Cost Effective Isolation of Adult Uses from Sensitive Populations.

The first, and perhaps most obvious, advantage that the packing approach has over the cracking approach that ought to make it appealing to municipalities is that isolating adult uses in one area of a jurisdiction makes it easier for populations that have been identified as potentially being particularly sensitive to or disturbed by the negative secondary effects of these

establishments – such as the elderly, women, and children²⁶² – to simply avoid being in proximity to such businesses. While a dispersal ordinance keeps sexually oriented businesses from clustering close to one another, and typically includes terms requiring separation from residential zones, schools, and myriad other public places, this cracking approach nevertheless functions largely to scatter adult businesses throughout the city. As a consequence, it becomes much more difficult for individuals to simply eschew traversing in close proximity to adult establishments, since such businesses are spread throughout commercial, industrial, or other permissible zones in the whole of the municipality.

Conversely, by quarantining adult uses in one area within a municipality and providing information about where precisely this area is located, a city can ensure that those sensitive populations who care to avoid adult establishments have both the means and opportunity to simply circumvent that zone, thereby easily dodging any contact with sexually oriented businesses. Likewise, schools, churches, residential homes and other land uses that a municipality might want to separate from adult businesses and their potential negative secondary effects would still retain the ability to locate a fair distance apart from the single adult use zone established under a packing regime, so this advantage of the cracking approach would still be true in the packing regime. Thus, by making avoidance of adult uses easier for sensitive populations, a packing regime likely increases utility for the population overall by ensuring that the parties who disapprove of such uses (or are particularly susceptible to the negative secondary effects that may potentially accompany them) can limit contact with these establishments.

Along with the benefit that accrues to sensitive populations in being able to easily sidestep contact with adult establishments, this feature of the packing approach to erogenous

²⁶² See *supra* note 174.

zoning likewise increases the utility of the parties who are seeking sexually oriented entertainment and do not wish to be confronted with disapproving or sensitive populations during this pursuit. While under a cracking regime, individuals who enter adult establishments must do so in the midst of the full cross-section of the population, thereby potentially inadvertently offending populations that find such behavior scandalous or contributing to a climate where negative secondary effects can impact these populations, under the packing regime presumably most parties in the designated adult use zone would have shared objectives in being in that area, and thus would not subject one another to such derision. In short, only populations willing to affirmatively take on the secondary effects that allegedly accompany adult businesses would be exposing themselves to these potential harms. Thus, the population that most desires the services provided by adult establishments would largely internalize the negative externalities generated by such businesses. By aligning incentives in this manner, overall utility would presumably be increased.

Finally, at least one scholar has suggested that packing adult establishments actively adds value to society by facilitating the development of a nexus for community-building for populations that have otherwise been marginalized, and who have special interest in public space for sexual expression. Using New York as an example, Professor Michael Warner suggests that

for queers the concentration of adult businesses has been one of the best things about them. The gay bars on Christopher Street draw customers from people who come there because of its sex trade. The street is cruisier because of the sex shops. . . . Not all of the thousands who migrate or make pilgrimages to Christopher Street use the porn shops, but all benefit from the fact that some do. After a certain point, a quantitative change becomes a qualitative change. A critical mass develops. The street becomes queer. It develops a dense, publicly accessible sexual culture. It therefore becomes a base for non-porn businesses like the Oscar Wilde Bookshop. And it becomes a political base from which to pressure politicians with a gay voting bloc.²⁶³

²⁶³ MICHAEL WARNER, *THE TROUBLE WITH NORMAL* 172 – 73 (1999).

Thus, it is clear that by creating an easy, low cost means for sensitive populations to avoid adult establishments, packing increases utility for both the customers of sexually oriented businesses and for those parties that would prefer to avoid such businesses. It is far from certain that cracking could accrue comparable benefits.

2. *Efficient Use of Public Resources.*

A second possible benefit of packing is that this approach makes it easier for cities to target and address adult businesses' negative secondary effects in an efficient manner. As one of the few reports to discuss the merits of packing points out: “[h]eavier traffic, limited parking space, higher police costs and other effects of the adult entertainment industry on the community can be easier to identify when the uses are concentrated into one area.”²⁶⁴ By making it easier to evaluate the “total public impact of pornographic uses,”²⁶⁵ packing can inform municipalities' calculations about the jurisdiction's need for certain public resources, and thus lowers the likelihood that a city mismanages its resources by over- or under-estimating expenditures for such services in areas where adult businesses are located.

Conversely, cracking disseminates adult businesses (and thus their secondary effects) throughout different areas of the city, thus making it difficult to determine whether the social ills in those areas are related to how the municipality handles sexually oriented businesses or if they result from other factors. As a consequence, the probability that miscalculation will occur when the status of an area changes (i.e. when a sexually oriented business moves into it or leaves) rises dramatically. Additionally, cracking ensures that the unique problems that may attend sexually oriented businesses intermingle with those that merely arise due to other considerations, making

²⁶⁴ MANATEE COUNTY, *supra* note 153, at 6.

²⁶⁵ *Id.*

it harder to determine a single solution that may alleviate the possible multiplicity of concerns that plague a given area and perhaps making it necessary for a city to balance considerations about how a resource expenditure might affect different kinds of businesses in contradictory ways.

Moreover, by containing all of the negative secondary effects that allegedly accompany adult establishments in one zone, the city can potentially deploy specialized enforcement agents to mitigate these concerns because it will be clear where these particularized problems are primarily arising. For example, if a city believes that public health concerns, such as increased drug use or prevalence of sexually transmitted disease, are an unintended consequence of the presence of adult establishments, it could choose to purposely locate public health services such as needle exchanges or sexual health testing and education programs in areas proximate to or within the established adult zone, thereby aiming city resources squarely at the likely source of the problem. Similarly, given that most municipalities believe that increased criminal activity is a prominent secondary effect of adult establishments,²⁶⁶ concentrating such businesses in one area and simply designating a higher number or specialized group of police to handle that zone might be a more efficient means of managing this problem; cracking only spreads the problem throughout the city, necessitating a higher level of vigilance in all areas as opposed to increased focus in only one region.

3. Lower Administrative Costs.

Another benefit that the few cities noting the advantages of packing highlighted was the lower administrative costs that accompany a concentration approach to erogenous zoning. The three distinct administrative cost savings that are worth underscoring about the packing approach

²⁶⁶ See text accompanying note 171, *supra*.

are that it: (1) facilitates the severability of the adult zone from other zones, leading to fewer legal concerns; (2) alleviates the need for “costly case-by-case review of adult business requests”²⁶⁷ to ensure that new or existent businesses are adhering to the separation requirements set by the zoning scheme; and (3) creates a set upper bound for the number of adult businesses, as it establishes *ex ante* the limited space available for inclusion in the adult zone. These three advantages will be briefly explored in turn.

First, cities utilizing a packing approach can institute an adult zone with regulations that are severable and distinct from the zoning laws that might govern other districts within the municipality. This ensures that “[a]ny changes to other districts will not have an effect upon the adult entertainment businesses within the special overlay district,”²⁶⁸ and means that once the zoning scheme of the adult district has been legally upheld, the city need not worry about inadvertently opening itself up to subsequent challenges by, for example, instituting changes in the general zoning scheme that accidentally have significant or disproportionate consequences on adult businesses. Under cracking, however, such legal isolation is not possible: any modification of the general zoning scheme necessarily also will have impacts on the rights and obligations of adult businesses located in those districts. As a consequence, whenever the city seeks to amend the overall zoning scheme for its jurisdiction, it will have to specially consider limitations imposed upon its zoning powers due to the presence of constitutionally-protected adult business speech in order to avoid costly litigation.

Second, packing eliminates the need for individuated evaluation of new adult business features – once the zone is established, any new sexually oriented business located outside of the

²⁶⁷ MANATEE COUNTY, *supra* note 153, at 6.

²⁶⁸ *Id.*

designated area will clearly be in violation of the city's zoning scheme and thus punishable by law. While cracking necessitates review on numerous dimensions – for example, determining the new establishment's precise distance from other adult businesses, schools, parks, and variable other land uses – packing simply designates an area and penalizes any and all businesses that fall within the ordinance's 'adult business' definition that fails to locate in that zone. Not only is the evaluation of the legality of the adult business's location much simpler to determine under a packing regime, but also citizens' ability to correctly notify the city government that an adult business has opened in an impermissible location will be increased under this approach, dramatically lowering administrative costs associated with monitoring compliance with the zoning ordinance. Essentially, a city with a packing approach will be able to outsource much of its monitoring about ordinance compliance to the greater population of public citizens, who can simply report that an adult business has opened in any area outside the adult zone and be certain that the establishment is acting impermissibly. Thus, because it will be less necessary to actively monitor ongoing compliance with the zoning ordinance due to public participation, and because the review process for legality for new businesses is much abbreviated, there are potentially significant administrative savings resulting from a packing approach.

Third, for cities that only have a limited amount of resources to devote to managing the secondary effects of adult businesses, a packing approach may be a winning long term strategy to keeping administrative costs from ballooning, as it limits the number of adult establishments that are able to locate in a given municipality by designating in advance only a set amount of land that can be put to adult business use. In contrast, a "dispersal method has no upper limit of adult

businesses created, provided all the separation requirements are met.”²⁶⁹ As a result, cities adopting cracking potentially open themselves up to much more extensive growth of the adult industry in their municipality, and thus also to having to continually reevaluate the effort, resources, and energy the city must dedicate to mitigating the problems that might accompany the presence of these businesses. In contrast, cities adopting packing can determine in advance the upper bounds of area that can be devoted to adult business land uses and thereby gain a better sense of how many resources will need to be expended towards this area in the future.

Ultimately, because most cities fail to meaningfully discuss the possible benefits of the packing approach, it is impossible to discern whether they opted for the cracking method because of a belief that it was substantively better, or rather simply because they were ignorant of the numerous potential advantages of the packing approach. Therefore, merely because a consensus has emerged around the cracking approach one cannot assume that municipalities meaningfully understand the comparative advantages of each method or that the cracking approach is the superior scheme to maximize welfare.

CONCLUSION

Although more than twenty-five years have passed since the Supreme Court first ruled it constitutionally permissible for municipalities to pursue erogenous zoning via either cracking or packing adult businesses, it nevertheless is still unclear which of these schemes is superior for maximizing total social welfare even today. Because most municipalities rely upon flawed and questionable research into the negative secondary effects of adult businesses to justify zoning ordinances regulating the presence of these establishments in their community, the fact that

²⁶⁹ *Id.* at 7.

cracking has emerged as a consensus approach across United States jurisdictions should not be viewed as the definitive crowd-sourced answer to this inquiry.

Undoubtedly, further study on the question of the impact of various erogenous zoning approaches is needed if we are truly to understand the real-world impacts that the legal rules chosen to govern the organization of our cities have on efficient use of municipality resources and on promoting the sometimes disparate interests that the diverse populations constituting the public may hold. However, already there are good reasons to believe that cracking perhaps is being chosen as the dominant approach by legislators who value short term transaction cost savings over the long term utility increases, efficiency gains, and administrative cost savings that could accrue to their jurisdiction if only the more politically unpopular packing approach were adopted instead. It is the job of scholars to critically evaluate the reasons animating policymakers and the comparative benefits of choosing different legal rules in order to determine whether society is acting rationally and optimally – in the context of erogenous zoning it is clear that much of this work is still left to do.

APPENDIX A

Identifying Features of Secondary Effects Studies

Year	City	Title	Prepared By	Pages	Region	Division
1977	Los Angeles, CA	Study of the Effects of the Concentration of Adult Entertainment Establishments	Planning or Development Department	52	West	Pacific West
1977	Cleveland, OH	Smut Shop Outlets, contribution of these outlets to the increased crime rate in the census tract areas of the smut shops	Police Officer: Carl I. Delau	2	Midwest	East North Central
1977	Amarillo, TX	A Report on Adult Zoning and Other Methods of Regulating Adult Entertainment in Amarillo	Planning or Development Department	18	South	West South Central
1978	Whittier, CA	Amendment to Zoning Regulations: Adult Businesses in C-2 Zone with Conditional Use Permit	Planning or Development Department	21	West	Pacific West
1978	Las Vegas, NV	Minutes on Prohibiting Sexually Oriented Businesses	City Commission minutes	33	West	Mountain West
1979	Phoenix, AZ	Adult Business Study	Planning or Development Department	9	West	Mountain West
1980	Minneapolis, MN	An Analysis of the Relationship Between Adult Entertainment Establishments, Crime, and Housing Value	Outside Expert: Marla McPherson & Glenn Silloway	47	Midwest	West North Central
1980	Islip, NY	Study & Recommendation for Adult Entertainment in the Town of Islip	Planning or Development Department	36	Northeast	Middle Atlantic
1982	Beaumont, TX	Regulation of Adult Uses, Revised	Planning or Development Department	6	South	West South Central
1983	Houston, TX	Committee on the Proposed Regulation of Sexually Oriented Business: Legislative Report	Special Committee	39	West	West South Central
1984	Indianapolis, IN	Adult Entertainment Businesses in Indianapolis: An Analysis	Planning or Development Department	52	Midwest	East North Central
1986	Oklahoma City, OK	Adult Entertainment Businesses in Oklahoma City: A Survey of Real Estate Appraisers	Planning or Development Department	5	South	West South Central

1986	Austin, TX	Report on Adult Oriented Businesses in Austin	Planning or Development Department	44	South	West South Central
1986	El Paso, TX	Effects of Adult Entertainment Businesses on Residential Neighborhoods	Planning or Development Department	38	South	West South Central
1987	Des Moines, WA	Des Moines Adult Use Study	Outside Expert: Robert W. Thorpe	22	West	Pacific West
1987	Manatee Co., FL	Adult Entertainment Business Study for Manatee County	Planning or Development Department	23	South	South Atlantic
1987	Bellevue, WA	A Study on the Need to Regulate the Location of Adult Entertainment Uses	Planning or Development Department	37	West	Pacific West
1988	Saint Paul, MN	1988 Supplement to Zoning Study	Planning or Development Department	9	Midwest	West North Central
1989	Seattle, WA	Director's Report: Proposed Land Use Code Text Amendment	Department of Construction and Land Use	28	West	Pacific West
1989	New Hanover County, NC	Regulation of Adult Entertainment Establishments in New Hanover County	Planning or Development Department	16	South	South Atlantic
1989	State of Minnesota AG Working Group	Report of the Attorney General's Working Group on the Regulation of Sexually Oriented Businesses	Special Committee	46	Midwest	West North Central
1990	Tucson, AZ	Adult Entertainment Ordinance, Memorandum	Police Officer: Michael J. Leverenz	5	West	Mountain West
1991	Garden Grove, CA	The Relationship Between Crime and Adult Business Operations on Garden Grove Boulevard	Outside Expert: Richard McCleary & James Meeker	50	West	Pacific West
1991	Adams County, CO	Adams County Nude Entertainment Study	Police Officer: J. J. Long	7	West	Mountain West
1991	Houston, TX	Committee Legislative Report on Proposed Amendments to Article III of Chapter 28 of the Code of Ordinances (Sexually Oriented Businesses)	Special Committee	16	South	West South Central
1992	Oklahoma City, OK	Quality of Life: A Look at Successful Abatement of Adult Oriented Business Nuisances in Oklahoma City, Oklahoma (1984 - 1989)	Police Officer: Jon Gustin	9	South	West South Central

1993	St. Croix County, WI	Regulation of Adult Entertainment Establishments in St. Croix County	Planning or Development Department	16	Midwest	East North Central
1994	Times Square, NY	Report on the Secondary Effects of the Concentration of Adult Use Establishments in the Times Square Area	Outside Expert: Insight Associates	53	Northeast	Middle Atlantic
1994	New York, NY	Adult Entertainment Study	Planning or Development Department	68	Northeast	Middle Atlantic
1995	Rome, GA	Presentation Made to the Rome City Commission	City Commission minutes	5	South	South Atlantic
1996	Newport News, VA	Adult Use Study	Planning or Development Department	21	South	South Atlantic
1996	Environmental Research Group	Report to the American Center for Law and Justice on the Secondary Impacts of Sex Oriented Businesses	Outside Expert: Peter Hecht	18	n/a	n/a
1996	Saint Mary's, GA	The Evidence of Relationships Between Adult-Oriented Businesses and Community Crime and Disorder	Police Officers: Ed Wassman & Dar Hendrickson	15	South	South Atlantic
1997	Dallas, TX	An Analysis of the Effects of SOBs on the Surrounding Neighborhoods in Dallas, Texas	Outside Expert: Peter Malin	10	South	West South Central
1997	Houston, TX	Sexually Oriented Business Ordinance Revision Committee Legislative Reports	Special Committee	37	South	West South Central
1997	Cleburne, TX	Why and How our City Organized a Joint County-Wide Sexually Oriented Business Task Force	Special Committee	13	South	West South Central
1997	Hamilton County, TN	Community Protection Committee's Final Report on Vice in Hamilton County with Recommendations	Special Committee	42	South	East South Central
1998	Ellicottville, NY	Adult Business Study	Outside Expert: Gary Palumbo	20	Northeast	Middle Atlantic
1998	Denver, CO	A Report on the Secondary Impacts of Adult Use Businesses in the City of Denver	Planning or Development Department	55	West	Mountain West
2005	Effingham Co, IL	Report of Richard McCleary, Ph.D	Outside Expert: Richard McCleary	26	Midwest	East North Central
2005	Kennedale, TX	Report to the City Attorney on Crime-Related Secondary Effects	Outside Expert: Richard McCleary	27	South	West South Central

APPENDIX B

Definitions of “Adult Business” Utilized by Secondary Effects Studies

Based Primarily on Content of Materials
Los Angeles, CA (1977); Whittier, CA (1978); Houston, TX (1983); Indianapolis, IN (1984); Oklahoma City, OK (1986); Austin, TX (1986); El Paso, TX (1986); Des Moines, WA (1987); Manatee County, FL (1987); Saint Paul, MN (1988); Seattle, WA (1989); New Hanover County, NC (1989); Houston, TX (1991); Oklahoma City, OK (1992); St. Croix County, WI (1993); Times Square, NY (1994); New York, NY (1994); Rome, GA (1995); Newport News, VA (1996); Environmental Research Group (1996); Saint Mary’s, GA (1996); Dallas, TX (1997); Houston, TX (1997); Ellicottville, NY (1998); Denver, CO (1998)

Based Primarily on Exclusion of Minors by Reason of Age
Amarillo, TX (1977); Minneapolis, MN (1980); Islip, NY (1980); Beaumont, TX (1982); Bellevue, WA (1987)

Unclear
Cleveland, OH (1977); Las Vegas, NV (1978); Phoenix, AZ (1979); State of Minnesota (1989); Garden Grove, CA (1991); Adams County, CO (1991); Times Square, NY (1994); New York, NY (1994); Rome, GA (1995); Environmental Research Group (1996); Saint Mary’s, GA (1996); Dallas, TX (1997); Effingham County, IL (2005); Kennedale, TX (2005)

APPENDIX C

Breakdown of Major Secondary Effects by Municipality Report

Crime
Los Angeles, CA (1977); Cleveland, OH (1977); Amarillo, TX (1977); Whittier, CA (1978); Las Vegas, NV (1978); Phoenix, AZ (1979); Minneapolis, MN (1980); Islip, NY (1980); Beaumont, TX (1982); Houston, TX (1983); Indianapolis, IN (1984); Oklahoma City, OK (1986); Austin, TX (1986); El Paso, TX (1986); Des Moines, WA (1987); Manatee County, FL (1987); Bellevue, WA (1987); Saint Paul, MN (1988); Seattle, WA (1989); New Hanover County, NC (1989); State of Minnesota (1989); Tucson, AZ (1990); Garden Grove, CA (1991); Adams County, CO (1991); Oklahoma City, OK (1992); St. Croix County, WI (1993); Times Square, NY (1994); New York, NY (1994); Rome, GA (1995); Newport News, VA (1996); Environmental Research Group (1996); Saint Mary's, GA (1996); Dallas, TX (1997); Houston, TX (1997); Cleburne, TX (1997); Hamilton County, TN (1997); Ellicottville, NY (1998); Denver, CO (1998); Effingham County, IL (2005); Kennedale, TX (2005)

Property Values
Los Angeles, CA (1977); Amarillo, TX (1977); Whittier, CA (1978); Las Vegas, NV (1978); Phoenix, AZ (1979); Minneapolis, MN (1980); Islip, NY (1980); Beaumont, TX (1982); Houston, TX (1983); Indianapolis, IN (1984); Oklahoma City, OK (1986); Austin, TX (1986); El Paso, TX (1986); Des Moines, WA (1987); Manatee County, FL (1987); Bellevue, WA (1987); Saint Paul, MN (1988); Seattle, WA (1989); New Hanover County, NC (1989); State of Minnesota (1989); Garden Grove, CA (1991); Houston, TX (1991); St. Croix County, WI (1993); Times Square, NY (1994); New York, NY (1994); Newport News, VA (1996); Environmental Research Group (1996); Dallas, TX (1997); Cleburne, TX (1997); Hamilton County, TN (1997); Ellicottville, NY (1998); Denver, CO (1998)

Blight/Noise
Los Angeles, CA (1977); Amarillo, TX (1977); Whittier, CA (1978); Las Vegas, NV (1978); Phoenix, AZ (1979); Minneapolis, MN (1980); Islip, NY (1980); Beaumont, TX (1982); Houston, TX (1983); Oklahoma City, OK (1986); Des Moines, WA (1987); Bellevue, WA (1987); Seattle, WA (1989); New Hanover County, NC (1989); State of Minnesota (1989); Garden Grove, CA (1991); Adams County, CO (1991); St. Croix County, WI (1993); Times Square, NY (1994); New York, NY (1994); Environmental Research Group (1996); Dallas, TX (1997); Ellicottville, NY (1998); Denver, CO (1998)