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The Economics of On-Premise Signs

USSCF ON-PREMISE SIGNS / ECONOMIC ANALYSIS CONCLUSIONS

The Economics of On-Premise Signs

A Research Project Of The
UNITED STATES SIGN COUNCIL FOUNDATION

By
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to provide a verifiable
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as a vital communicative resource
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The Economics of On-Premise Signs

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1. Introduction

Starting a small retail business is not for the faint of heart. Over half of all new retail stores fail within the first four years.[2] Given this daunting failure rate, banks are unsurprisingly reluctant to extend credit to small businesses,[3] raising the stakes for entrepreneurs to quickly connect with customers and the community. One important way new businesses make that connection is with an *on-premise sign*. In their marketing textbook "Advertising, Promotion, and Other Aspects of Integrated Marketing Communications," now in its ninth edition, Professors Terence Shimp (U. South Carolina) and J. Craig Andrews (Marquette) describe on-premise signs as "the most cost-effective and efficient form of communication available to retail businesses," adding:

> *"No amount of money spent on other communication media will equal the investment returns of the well-designed and optimally visible on-premise sign. Surveys of new customers/clients disclose over and over that the on-premise business sign either: (1) provided new customers with their first knowledge of the company, or (2) provided new customers with their first impression of the company. This is true even if the customer originally learned of the business through some other communication medium. [Based on scholarly research on the subject], it is no longer an overstatement to assert that legible, conspicuous place-based signage, easily detectable and readable within the cone of vision of the motoring public, is essential to small business survival."*[4]

1.1 Lack of Consistent On-Premise Sign Regulations

On-premise signs are "essential to small-business survival" but, in many municipalities, local businesses face a variety of regulatory constraints on what sorts of signs they are allowed to

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[2] See "Startup Business Failure Rate by Industry" at statisticbrain.com, summarizing a February 2015 report by the Small Business Development Center of Bradley University.

[3] In April 2015, Forbes magazine reported that "Nationwide, only about half of businesses with less than $1 million in revenue secured any credit in 2014." See "American Entrepreneurship is Actually Vanishing. Here's Why" by Leigh Buchanan.

[4] This quote is from page 220 of Shimp and Andrews, 7th Edition.

display. Worse still, there is little consistency and uniformity in municipal sign regulations – they can vary widely from town to town and state to state.

Consider Henrietta and Brighton, New York, neighboring suburban towns each with about 40,000 residents on the outskirts of Rochester. Despite all their similarities, Henrietta and Brighton have dramatically different signage regulations. Storefront signs in Henrietta are permitted to be more than twice as large as those in Brighton, while freestanding signs (on a business' property but not attached to the building) are automatically permitted in Henrietta up to 100 SF (with an additional bonus of 50 SF of sign area if there is landscaping under the sign) but prohibited in Brighton for all but shopping centers, office parks, and industrial parks. Moreover, whereas a code-compliant applicant can be approved in just 2-3 days in Henrietta, the approval process in Brighton must pass through three separate committees and takes 40-45 days.

Do Brighton's more stringent restrictions make it a better place to live? Or do they harm the town, by making it harder to start a successful new business and depriving local residents of the full variety of goods and services they could have enjoyed? Certainly, Brighton's rules impose meaningful burdens on businesses in the town. For instance, consider a small retail business located in a shopping center, whose storefront is 15-ft tall and 20-ft wide. In Henrietta, storefront signs can be 4 square feet (SF) per lineal foot of storefront. So, in this hypothetical example with a 20-ft storefront, the business could display an 80 SF sign. In Brighton, on the other hand, the rule is that signs cannot exceed 10% of the "fascia area" of the storefront which, in this case, is 15 x 20 = 300 SF. So, the same store that is allowed 80 SF in Henrietta is only permitted 30 SF in Brighton, a dramatic difference in allowable size.

Consider next a typical small professional business, such as a doctor's office, operating in a building of its own alongside a well-traveled road. The most easily visible signs along roads are free-standing signs within the "cone of vision" of drivers (see Figure 1 below), mounted in a perpendicular orientation to traffic for easiest visibility. Henrietta's rules would permit our hypothetical doctor's office to display such a freestanding sign, while Brighton's rule would forbid it. As a result, motorists in Brighton will be less likely to notice the doctor's office as they drive past, making it harder for people to discover that doctor's business and, ultimately, encouraging this doctor to set up shop in Henrietta rather than in Brighton.

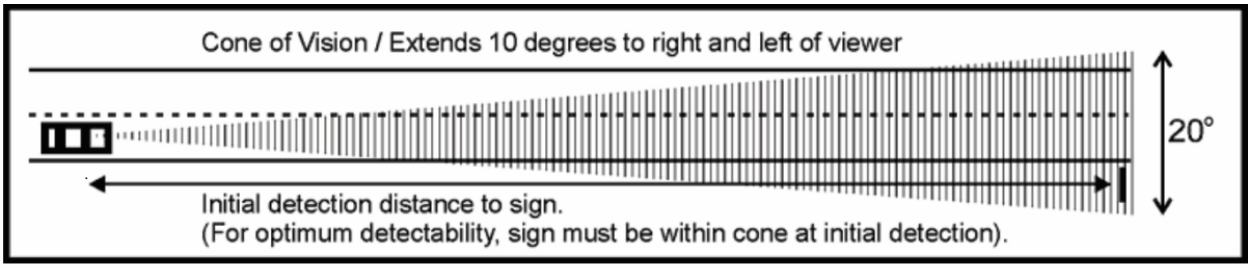

Figure 1: The cone of vision and detectability[5]

This is a hypothetical example, obviously, but business-owners do in fact take signage regulations into account when deciding where to operate. In one recent survey of business-signage coordinators[6] – including those at several well-known retail chains such as AutoNation, Office Depot, Rue 21, and Safeway – respondents were asked how on-premise regulations impact their stores' performance and their decision regarding where to operate. A majority rated being able to install their preferred signage as "9" or "10" on a 10-point scale in its importance for business performance, ranking "installation of preferred signage" on par with "health of the local economy" and "nature of adjacent stores." However, on average, respondents said that 32% of their sites could not install this preferred signage. The ability to install freestanding signs emerged as especially important to these businesses, with a third of those surveyed saying that they would reject a site if they were not allowed to erect a freestanding sign.

A Flawed Competition Metaphor

Why do some towns make it so hard to display signs "essential to small-business survival"? Not to discourage new businesses, certainly, although that is the unfortunate likely side-effect, but because some policy-makers believe that businesses need to be constrained, lest *competition* among them wreak havoc in the community. For instance, the Dutchess County Greenway Compact (DCGC), a consortium of towns in the Hudson River Valley in New York, had this to say about how signs ought to be regulated:

> *"Allowing signs to **compete** by being bigger, brighter, and more garish than their neighbors is a self-defeating spiral toward an ugly streetscape that just repels potential customers. Everyone wins when cities and towns instead encourage competition for the most creative*

[5] This image is taken from "On-Premise Signs Guideline Standards," United States Sign Council, 2003.
[6] "On Premise Signs: The Impact of Zoning Regulation on Site Performance" by Peter Everett and Michael Hostetler, United States Sign Council Research, 2005

signs, designed to be eye-catching because of their distinctive qualities, not because they dominate the site or block views of adjacent buildings."[7]

This is an instructive quote that captures a relatively common viewpoint which has informed on-premise signage regulations in many towns and municipalities, not just in Dutchess County. At the heart of this regulatory perspective is an implicit assumption that businesses' on-premise signs are in conflict and in competition with one another, to be "bigger, brighter, and more garish," to "win," "dominate," and "block" one another. Unfortunately, this is an inaccurate and ultimately quite misleading way of thinking about on-premise signs.

To "compete" is to "strive to gain or win some fixed scarce resource by defeating or establishing superiority over others who are trying to do the same." In business competition, *customers* are the "fixed scarce resource" that must be won. For instance, when Sprint announced its "Cut Your Bill in Half Event!" for current Verizon and AT&T customers, offering to "cut your rate plan in half" and "pay whatever it costs for you to switch," Sprint clearly had competition in mind, as the whole point of this promotion was to steal customers away from Verizon and AT&T. Competition is fierce in the cellphone business since just about everyone who wants a cellphone already has one. Consequently, the only way to acquire new customers is to compete for them, namely, to steal them from other carriers.

But that isn't always the case. In markets where there is room for growth, one business' efforts to build its own customer base can actually help other similar businesses, by raising customer awareness and interest in the type of service that they provide. For instance, in 1999, the employment website Monster.com showed a Super Bowl ad (titled "When I Grow Up") introducing itself to the public. At the time, most people would never have thought of using a website to search for a new job. "When I Grow Up" helped changed that, not only by launching Monster.com to success but also blazing the trail for other online job-matching services that have followed.[8] In this way, Monster.com's efforts to promote itself helped other businesses expand their own markets, to the point that online job-matching is now a thriving market offering numerous options for job-seekers and employers alike.

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[7] "Greenway Guides: Signs," Dutchess County, New York. http://www.co.dutchess.ny.us/EnvironmentLandPres/signs.pdf

[8] Monster.com's Super Bowl ad was "competitive" in the sense that it gave Monster.com a boost over other very similar job-search services at the time, such as Hotjobs.com, which Monster.com ultimately acquired in 2002. However, my point is that, by raising customer awareness of online job-search, Monster.com ultimately paved the way for literally thousands of other job-search services to enter the market, from niche services such as Dice.com to job-focused search engines (called "job aggregators") such as Indeed.com, which has now surpassed Monster.com as the most popular employment website.

In the same way, most streetscapes these days feature a wide variety of businesses, offering non-competing or even complementary goods and services. These businesses thrive or decline together, with the vibrancy of commerce that comes their way. Far from competing with one another, neighboring businesses rely on one another to create, together, an attractive shopping environment. Regulations based on the presumption that businesses are locked in harmful competition are therefore clearly misguided, apt to harm the communities they are intended to serve.

My goal in this report is to offer a thorough and systematic economic analysis of on-premise signage regulations, to provide local leaders with a sound conceptual foundation when it comes to how to regulate on-premise signs to serve their communities as well as possible.

1.2 Are Businesses Locked in a "Prisoners' Dilemma"?

The idea that competition is a flawed metaphor for how businesses interact through their on-premise signs can also be understood in the terms of "game theory," the branch of economics that studies strategic interactions. In particular, the crucial question is whether businesses, when they are deciding what on-premise signs to display, are in what economists call a "Prisoners' Dilemma."

		Prisoner #2	
		Confess	Not
Prisoner #1	Confess	***10 yrs (3rd-best)*** 10 yrs (3rd-best)	***free (best)*** 20 yrs (worst)
	Not	***20 yrs (worst)*** free (best)	***5 yrs (2nd-best)*** 5 yrs (2nd-best)

Figure 2: Payoff matrix for the Prisoners' Dilemma (explained below)

The story of the Prisoners' Dilemma goes like this.[9] The police have arrested two criminals on charges that carry a prison term of up to five years, but strongly suspect that they also committed a worse crime (say, armed robbery) that carries a term of up to twenty years. The police interrogator puts them in separate cells and says: "It's time for you to confess to the armed robbery. How long you stay in prison will depend on who confesses. If you're the only one to confess, I will let you walk free today because of your cooperation. Otherwise, you'll spend five years behind bars if neither of you confesses, ten years if both of you confess, and twenty years if you're the only one not to confess." Figure 2 illustrates the players' payoffs (in terms of jail time) in each possible outcome of the game, using a so-called "payoff matrix".

Note that each prisoner has a unilateral incentive to confess, regardless of the other's move. (If the other prisoner confesses, confessing reduces your own sentence from twenty to ten years. If the other prisoner does not confess, confessing allows you to avoid prison entirely.) However, if both confess, both get a longer sentence (10 years, the 3rd-best outcome) than if neither confessed (5 years, the 2nd-best outcome). Notice that both prisoners get a worse outcome when they do what is in their own individual interest (by confessing) than if they were both to act against their own interest (by not confessing). In this context, a rule that *disallowed* the prisoners from confessing would make them both better off.

What is the connection, if any, with on-premise signs? Consider Figure 3 below, which casts the decisions that businesses make regarding what sort of signs to display as "The On-Premise Signage Game". In particular, suppose that each business must decide whether to invest to display a "more effective" sign or to spend less on a "less effective" sign. We will discuss exactly what "effectiveness" means in depth later but, for now, suffice it to say that a "more effective" sign is one that draws more customers to visit the business that displays it. For this game to be a Prisoners' Dilemma, three conditions must hold:

1. Each business must have an incentive to display a more effective sign itself
2. Each business must be worse off when other businesses display more effective signs
3. All businesses must be better off, collectively, if they all display less effective signs

[9] Princeton mathematician Albert W. Tucker created the story of the Prisoners' Dilemma in 1950 as an example for a lecture on game theory to psychology students. One of Tucker's students – John Nash – would years later be played by Russell Crowe in the Oscar-winning movie "A Beautiful Mind."

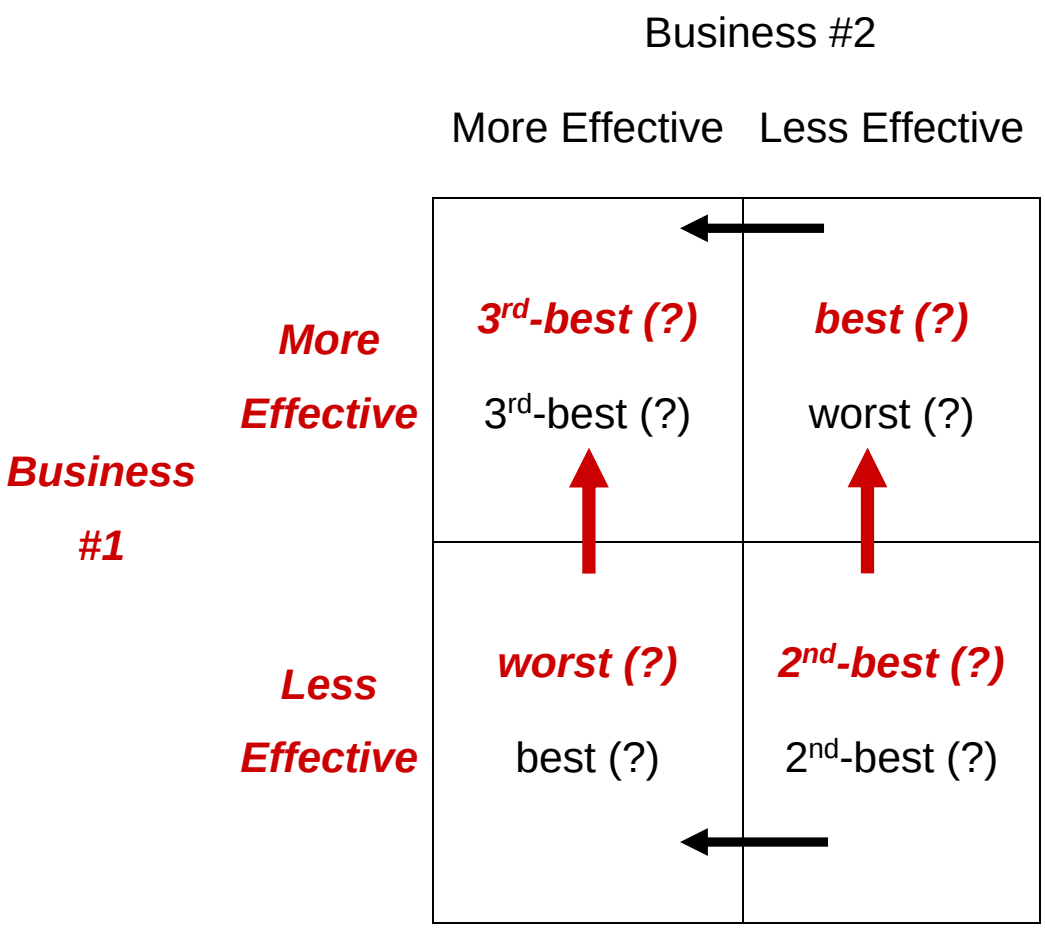

Figure 3: Payoff matrix for the On-Premise Signage Game

<u>Why might businesses NOT BE in a Prisoners' Dilemma?</u>

One may question whether any of the three conditions listed above actually hold in practice. Consider first what may seem like the most obvious of the three conditions, that businesses have an incentive to display signs that will induce more customers to visit their store. Every business would of course like to have more customer traffic, but getting it may be costly! For example, displaying the award-winning sign shown in Figure 4 undoubtedly allows Turkey Hill Dairy to attract more people to stop and take a tour of its factory in Lancaster County, Pennsylvania, but such a sign would likely cost quite a bit of money, more than most businesses would choose to spend.

Figure 4: An effective but costly on-premise sign

There is a cost-benefit trade-off that every business takes into account when deciding what sort of sign to display and, because of this, some businesses may choose to display less effective signs. Certainly, this is true of businesses that allow their on-premise signs to fall into disrepair, such as those shown in Figure 5, even though this likely turns away some potential customers.

Figure 5: On-premise signs in a state of disrepair

Next, consider the assumption that each business is worse off when others display more effective signs. This is clearly untrue in the case of signs that are in disrepair, as businesses naturally suffer when neighboring businesses have unsightly signs. More generally, does one business' success automatically translate into failure for other nearby businesses? This is also

clearly untrue, as neighboring businesses often benefit one another by drawing customers to their shared retail area.

Take the example of Turkey Hill Dairy and its “Turkey Hill Experience,” the “hands-on ice cream experience” promoted by the sign shown in Figure 4. Right across the street from Turkey Hill is a Burger King. Does Burger King suffer as a result of Turkey Hill’s prominently-placed sign? Is Burger King somehow overshadowed and diminished? Of course not! I’m sure that the manager of that Burger King LOVES the fact that people are stopping to tour Turkey Hill’s ice-cream facility, because many of them undoubtedly get a burger on their way home!

Finally, and for the same reason, the third assumption that the business community as a whole would be better if all businesses were forced to display less effective signs clearly also often fails to hold. If all the businesses in some area are forced to display less effective signs, the most natural consequence is that they will all do less business! So, the viewpoint that businesses are locked in a Prisoners’ Dilemma is on shaky ground. Nonetheless, there are at least some situations in which this perspective could be valid.

Why might businesses BE in a Prisoners’ Dilemma?

We have already seen one point of view that paints the on-premise signage game that businesses play as a Prisoners’ Dilemma. According to the common regulatory perspective, as expressed by the Dutchess County Greenway Compact (DCGC), businesses have an incentive to display “bigger, brighter, and more garish” signs than their neighbors but that, when everyone does so, the retail district as a whole becomes less attractive to consumers. If this view is correct, the game that businesses play is a Prisoners’ Dilemma since, by assumption, businesses harm one another when they display more effective signs (“garishness” cannot be good), so much so that the retail district as a whole suffers. Of course, if this is correct, businesses themselves will be the first to welcome rules and restrictions that compel them to display more tasteful (albeit *individually* less effective) on-premise signs.

This is a crucial point worth repeating. IF the assumptions of the common regulatory perspective are correct – if the on-premise signage game that businesses play is indeed a Prisoners’ Dilemma – then businesses will find it in their collective self-interest to support rules and regulations that limit what sort of signs they are permitted to display. What this means, in particular, is that town regulators who subscribe to this view ought to consult their local business communities, if nothing else as a *reality check* of their own regulatory philosophy. Why? If the local business community would like to see the town’s rules *loosened*, the assumption

undergirding the town's regulatory approach – that businesses are locked in fierce competition over customers and hence trapped in a Prisoners' Dilemma – cannot be true, and a complete rethink of the town's on-premise signage rules may well be in order.

This is not to say that towns ought to loosen their signage rules whenever local businesses want them to. There is a legitimate rationale, discussed more in Section 2.1, for imposing rules that constrain business activity in ways that the business community would oppose. My point is just that the philosophical rationale that undergirds many town's on-premise signage rules is poorly grounded and, indeed, contradicted by the facts on the ground. How so? If it were true and businesses were indeed trapped in a Prisoners' Dilemma, businesses would support the rules that towns have imposed upon them. However, in fact, business groups typically chafe under many towns' on-premise signage rules as overly restrictive.

Key Points Made in This Section

- There is little rhyme or reason to existing on-premise signage regulations. Fortunately, the principles of economic analysis can help town leaders design sensible signage rules that benefit their communities.
- Many town leaders base their view of on-premise signage on a flawed competition ("Prisoners' Dilemma") metaphor, as if the only purpose of such signs is to gain the upper hand over other businesses. Signage rules based on this limited view can ultimately harm the communities they are intended to serve.

2. Rationales for Regulating On-Premise Signs

Americans have widely differing views about the proper scope of government, but everyone agrees, I'm sure, that there is value in having *rules* that govern our behavior, in at least some situations. Of course, the First Amendment places constitutional limits on a municipality's ability to lawfully regulate speech, including commercial speech,[10] but municipalities can enact content-neutral regulations when such rules serve the public interest.

There are two sorts of ways in which rules that limit businesses' signage options can improve public welfare, related to what I call (i) "the protective rationale," that rules can limit activities that harm the public, and (ii) "the strategic rationale," that rules can allow communities

[10] See e.g. the recent Supreme Court ruling, Reed v. Town of Gilbert, 576 (2015), in which the Court held that the town of Gilbert, Arizona had enacted "content-based regulations of speech that cannot survive strict scrutiny."

to escape "strategic traps" – such as "public-good problems" and "coordination problems" – that would otherwise stop them from achieving their full potential.[11]

2.1. The Protective Rationale

In April 2015, the U.S. Department of Justice ("DOJ") announced that it would seek to block Comcast's proposed acquisition of Time Warner Cable ("TWC"), effectively killing the deal between these two cable giants. Such a merger would likely have allowed Comcast and TWC to earn greater profits, a good thing for these companies' shareholders, but DOJ blocked the deal because it concluded that consumers would likely be harmed. According to DOJ's "Horizontal Merger Guidelines," DOJ seeks to block mergers of competing businesses whenever such mergers will be "likely to encourage one or more firms to raise price, reduce output, diminish innovation, or otherwise harm customers."[12] In other words, DOJ doesn't seek to *balance* the interests of customers and business but focuses entirely on customers' welfare and will seek to block a merger whenever customers are likely to be harmed, no matter how beneficial the merger might have been to the companies involved. This is the essence of the protective rationale, that the rule-maker (or "regulator") wants to avoid any harm on some preferred group.

When town leaders approach their on-premise signage rules similarly, they will naturally focus first and foremost on the welfare of their own citizens, barring signs that are likely to impose significant harm on their citizens, regardless of how much benefit others might get from those signs. When doing so, however, it is essential to consider how the welfare of a town's citizenry is tied to and interconnected with the welfare of others. Well-intentioned policies that are blind to this interconnectedness may well backfire and harm the very people they are intended to serve.

Example: Making Signs Harder to See

In every town, there are some people (who I will refer to as "scenery-lovers") who don't like looking at businesses' on-premise signs. Recognizing that seeing such signs "harms" these

[11] A third "paternalistic rationale" for having rules is that people sometimes cannot be trusted to make good decisions for themselves. Paternalistic rules have their place but not in most spheres of public life, and certainly not when it comes to on-premise signs. The on-premise sign that works best for any given business will depend on a host of factors, from the store's location to how much money the owner has on hand to invest. Clearly, then, it would never make sense to impose a rule requiring businesses to adopt a certain sort of sign, on the grounds that such signs are the most effective at helping that business-owner earn a profit. We trust business-owners to make such decisions for themselves.

[12] This quote is taken from the Horizontal Merger Guidelines of the DOJ and Federal Trade Commission, describing the consumer-harm criterion that antitrust authorities use when evaluating mergers. See http://www.justice.gov/atr/public/guidelines/hmg-2010.html

people, town leaders might impose rules that make on-premise signs harder to see, in any number of ways: by making signs too small to be easily seen or read from the roadway, by prohibiting freestanding signs or forcing freestanding signs to be mounted too low or located too far from the roadway to be easily seen and read, by prohibiting optimal lighting for on-premise signs, and so on.

While scenery-lovers may appreciate not seeing as many signs as before, such a move has several other indirect effects that may harm the community and perhaps even leave the scenery-lovers worse off than before:

1. *less consumer discovery* as consumers lose the opportunity to learn about the products and services that local businesses provide;
2. *less vibrant local-business scene* as retail businesses attract fewer customers and earn less revenue, ultimately making the town a less desirable place for retailers to operate;
3. *higher taxes or fewer public services* as lost business revenue translates into lost tax revenue (due to lost commerce and lower business property values), forcing local government to raise taxes on local citizens and/or provide fewer public services; and
4. *potentially more dangerous roads* as drivers looking for local businesses take far longer than necessary while trying to locate and read too-small on-premise signs.

2.2. The Strategic Rationale – Part One: Public-Good Problems

Rules that restrict people's options (or that provide incentives to influence people's choices) can also sometimes help groups escape strategic traps that have stopped them from achieving their full potential. For instance, "public-good problems" arise in any situation in which individuals can do something that helps others, but everyone has a selfish incentive not to do so.[13] The end result, when everyone does what is best for themselves, is that everyone suffers relative to what could have been. Notice how, in this context, a rule requiring people to act against their self-interest actually makes everyone better off, a "win-win" for all involved.

The Dutchess County Greenway Compact (DCGC) clearly had a public-good problem in mind, when arguing that *"Allowing signs to compete by being bigger, brighter, and more garish than their neighbors is a self-defeating spiral toward an ugly streetscape that just repels*

[13] Public-good problems are also commonly referred to as "free-rider problems" or as "the tragedy of the commons," as those who do not contribute to the public good are "free-riders" and their decision to take self-interested actions that harm the community can sometimes lead to the collapse of community-wide resources. Elinor Ostrom won the 2009 Nobel Prize in Economics for demonstrating how community self-regulation can help solve public-good problems.

potential customers." The "public good" in this case is a beautiful streetscape that attracts potential customers, and a public-good problem arises if individual businesses benefit by displaying signs that make the streetscape ugly and unattractive.

The notion of "streetscape" is clearly essential to the logic of DCGC's argument here, as no individual store would ever knowingly display a sign that repels potential customers. It is only when stores are brought together as neighbors that they can help or harm each other and, if it's true that their choices harm each other, get stuck in the "self-defeating spiral" of a public-good problem. Note that, if businesses' preferred signs really do harm one another, trapping them all in a public-good problem, businesses will *welcome* government regulations that restrict what sorts of signs that they can display. On the other hand, if businesses do not harm one another when they are left relatively unrestricted to choose their own on-premise sign – or if their favored signs actually benefit their neighbors – any intervention that constrains businesses' ability to choose their own sign will necessarily harm businesses within the streetscape.

Fortunately, there is an easy way for town leaders to determine whether the businesses in their communities are in fact mired in a public-good problem: ASK THEM!! If they are, businesses will be the first to welcome new rules that constrain their ability to display harmful signs. In that case, town leaders can impose such restrictions with confidence that doing so will make their communities a better place for their citizens as well, since businesses would never invite such restrictions unless they were in fact stuck in a strategic trap that was stopping their retail district from realizing its full potential. On the other hand, if local businesses argue that rules are already too restrictive, they clearly are NOT locked in a public-good problem.

What this means for town leaders is that they ought to listen to what the businesses in their streetscapes have to say about local rules intended to make those streetscapes more attractive to potential customers. If these rules are working as intended and truly contributing to the public good, business-owners will express satisfaction and town leaders can rest assured that they are serving their citizens well. But if businesses complain and chafe under these rules, town leaders ought to reconsider and admit the possibility that these rules may actually be harming the communities they were intended to serve.

2.3. The Strategic Rationale – Part Two: Coordination Problems

So-called "coordination problems" arise when individuals all benefit by coordinating their behavior. For instance, we all benefit when everyone chooses to drive on the same side of the road. In the same way, businesses within a retail district might all benefit when everyone

chooses signs that are in visual harmony. If so, clear expectations about what sorts of signs are appropriate within any given retail district can be valuable, to avoid situations in which neighboring businesses display clashing signs that ultimately harm everyone in the area.

Note that rules are not necessarily required to solve coordination problems. Rather, all that is needed is for a community's *standards* to be well-understood, since then all the businesses within the community will have an incentive to abide by them, as no one wants to be the only business that stands out like a sore thumb. (If "standing out like a sore thumb" is good for a business, perhaps because it allows a business to be more noticeable, then the issue at hand is not a coordination problem but a public-good problem in which the "public good" is visual harmony. In that case, rules may be necessary but affected businesses will welcome such rules, as previously discussed in Section 2.3.)

What this means for town leaders is that, where possible, they should empower business districts to decide for themselves what sort of standards and, if necessary, enforceable rules they want to impose on the signs displayed within their district, much as homeowners are allowed to impose standards through neighborhood associations. Such an approach would empower high-quality retail districts to differentiate themselves and ultimately spur retail districts to compete with one another in a positive way, to provide the most attractive shopping environments for customers to enjoy. Another way to make this same point is to note that towns themselves are in competition, to provide the most attractive shopping experience to customers. The towns that "win" this contest for customers will be those whose businesses win as well. So, again, town leaders should view local businesses as natural allies and partners.

Key Points Made in This Section

- Rules that govern on-premise signs are well-justified by the "protective rationale" that, if businesses are left free to display whatever signs they want, the public may be harmed.
- Well-intentioned town leaders may impose rules that harm the public, if they fail to account for such rules' indirect effects. For example, rules that make signs harder to see may backfire and make a town even less "scenic" than before.
- Rules that constrain businesses' options can sometimes make everyone better off, if businesses are trapped in a "public-good problem" or a "coordination problem." In these situations, we should expect businesses to support such rules.

3. When Do Signage Restrictions Benefit the Public?

Before we can determine how best to regulate on-premise signs, we need to address a more basic question: What is the *purpose* of on-premise signs? Being *seen* (or "detected") is obviously essential for any on-premise sign but, once seen, the content of an on-premise sign must be *understandable*, so that those who see the sign will recognize the nature of the business, and *attractive*, so that those who understand the sign will want to stop and patronize the store. So, the effectiveness of an on-premise sign actually depends on a combination of three factors:

1. detectability;
2. understandability; and
3. attractiveness

To avoid misunderstanding, please note that the "attractiveness" of a sign (for the purposes of this paper's analysis) refers to how well that sign induces people who see and understand the sign to patronize the business that displays it. In particular, an "attractive" sign need not be beautiful or appealing to the eye.

3.1 Are Customers "Captive"?

A fundamental distinction worth making right at the outset is between retail environments where customers are "captive" and those where they are not.

> *<u>Definition</u>: A customer is "captive" within a retail space when that customer has a (fixed) need that will be met be one and only one of the businesses in that space.*

For instance, travelers in an airport who are hungry for a meal are sure to visit one (and only one) of the restaurants located in the airport. These travelers are captive customers. On the other hand, pedestrians walking through a shopping district or drivers passing by a shopping center are NOT captive, since they might stop to buy things at several stores, or no store at all, depending on what on-premise signs these stores display.

In most retail districts governed by local signage ordinances, customers are clearly NOT captive. For instance, someone driving to work who stops at Starbucks for a cup of coffee might have gone to work without purchasing any coffee at all, had they not seen the Starbucks sign. So, the presence of a sign can cause someone to make a purchase when they would otherwise have purchased nothing. In a retail environment with captive customers, on the other hand,

signs never expand the total amount of commerce but (merely) serve to distribute a fixed amount of commerce among the businesses in a retail space.[14] Similarly, someone who stops at Starbucks for coffee may then decide to drop into the nearby Hallmark store to buy a get-well card for a friend. In this way, businesses frequently benefit when other nearby businesses display more effective signs, something that is also never true in a captive market.

Notice how the common regulatory perspective that we discussed earlier – epitomized by the Dutchess County Greenway Commission (DCGC) – does indeed make sense … *IF* customers are captive.[15] In that case, nearby businesses' signs really do "compete" for customers' attention, giving businesses a powerful incentive to invest in signs that will be more effective than their neighbors' signs at drawing in customers. As every business seeks to "out-do" its neighbors, all of them could very well descend into the sort of "self-defeating spiral" that regulators such as DCGC fear, an ultimately self-destructive battle over the market's captive customers.

3.2 Is There Harmful Competition?

When a business-owner is free to choose her own sign, she will obviously choose whatever sign she most wants to display but, in so doing, may potentially harm others. What I call "harmful competition" arises in the worst possible case, when (Condition #1) so much harm is imposed on other businesses that the business community as a whole suffers when businesses are free to display whatever sign they want and (Condition #2) everyone else suffers to some degree.

- *Harmful Competition Condition #1:* The sign that every business would most like to display *harms other businesses* more than it helps the business that displays it
- *Harmful Competition Condition #2:* The sign that every business would most like to display *harms everyone else* (consumers, passersby, local residents, etc.)

[14] Even though the total amount of commerce is fixed, this sort of contest for captive customers may still serve a beneficial purpose, by directing customers to businesses that are a better match for their needs. In particular, businesses' signage decisions need not be a "zero-sum game," even when customers are captive.

[15] As we will see later, the DCGC's view can also make sense if customers are not captive but businesses are limited to deciding whether or not to display distracting signs (like the "Pole-Spinner" featured in Section 4.1). What this misses, of course, is all the richness in businesses' signage choices, especially when it comes to making their signs more distinctive (Section 4.2) , more understandable (Section 4.2), and more attractive (Section 4.3), as well as all the ways that businesses can actually benefit one another when they display signs that increase customer traffic (Sections 4.3-4.4).

When businesses are locked in harmful competition, everyone clearly wins when rules are imposed that stop businesses from displaying harmful signs. The key question to ask, then, is whether these conditions for harmful competition hold in practice.

When a business displays a sign that draws more customers to its store and benefits itself, does it necessarily harm everyone else? Of course not! Consumers attracted to a store may discover new products and services, other businesses may benefit from the extra foot traffic, and so on. (Such "positive spillovers" are explored in greater depth in Section 4.) However, it certainly is *possible* that others will be harmed when a business does what is best for itself, in which case those who are harmed can potentially gain when rules are imposed that restrict businesses' signage options.

For instance, if customers are captive, any improvement in one business' sign that attracts more customers to its store will necessarily harm other businesses, by stealing away customers who would otherwise have gone to their stores. Consequently, any investment that one business makes to improve the attractiveness of its own sign will ultimately harm all other businesses *collectively* more than it helps that business *individually*.[16] In this way, Condition #1 is automatically satisfied when customers are captive. But what about Condition #2?

Are consumers, passersby, and local residents all necessarily harmed when a business displays a sign that successfully draws more customers to its store? Again, of course not! Even when customers are captive, signs can serve a useful purpose by allowing customers to quickly identify the business that will best serve their needs. For instance, in an airport terminal, people looking for a meal are captive customers because they cannot eat anywhere else, but restaurant signs are nonetheless very useful as they allow travelers to find food that they will enjoy. In the same way, if the most effective signs are also the most pleasing to look at, then passersby and local residents will naturally *benefit* when businesses are free to compete with more and more effective signs.

3.3 Summary of Analysis So Far

Suppose that we are considering imposing some new restriction that will stop businesses from displaying their most preferred sign and force them instead to display a less-preferred sign.

[16] To see why, imagine that one business can attract $1,000 additional business by making a $200 investment in its sign. Such an investment will increase the individual businesses' own profit by $800 while reducing others' profit by $1,000, for a net loss of $200 to the overall business community.

What effects will such a restriction have on other businesses and on the public?[17] As we've seen, many municipalities' signage regulations are based on the assumption – made explicit by the Dutchess County Greenways Commission – that businesses always have an incentive to display signs that are "bigger, brighter, and more garish than their neighbors." Garish signs are, by definition, unattractive and obtrusive. So, this assumption about the sorts of signs that businesses would like to display immediately implies a second assumption, that businesses' favored signs automatically harm the public and, indeed, that they automatically harm the business community as a whole by repelling customers away from the area.

This is the case of **"harmful competition"** (shown below in Table 1), when businesses' preferred signs harm both the public and other nearby businesses. But what if businesses' preferred signs actually benefit the public, or benefit other nearby businesses. If so, obviously, regulations based on the *assumption* that businesses' preferred signs harm the public and other businesses will be apt to create their own harms. When crafting and justifying on-premise signage regulations, then, town leaders ought not just *assume* that businesses' preferred signs are always bad for everyone else, but instead carefully consider the *actual* impacts that these signs are likely to have on others.

As I argue next in Section 4, the most relevant case in practice – especially in "destination-shopping areas" where potential customers must choose to travel– is actually the opposite case of **"beneficial cooperation."** Rather than being harmed, other businesses and the public typically *benefit* when a business invests to make its sign more effective. Consequently, rather than being locked in harmful competition and displaying signs that spiral out of control in their bigness and overall badness, businesses actually rely on one another to display signs that will make the overall retail area as attractive and vibrant as possible. The main strategic challenge is therefore not a "self-defeating spiral" of excessive investment but, actually, a "free-rider problem" in which businesses do not invest enough in their own on-premise signs. In that context, restrictions that limit businesses' ability to display their favored signs are counter-productive and perverse.

[17] Of course, in reality, the "public" is composed of a number of different interest groups, some of whom may benefit while others are harmed by some given signage restriction.

	My Preferred Sign *Harms* the Public	My Preferred Sign *Benefits* the Public
My Preferred Sign *Steals* or *Repels* Other Businesses' Customers	"Harmful Competition" *[implicit in common view of many regulators]*	"Beneficial Competition"
My Preferred Sign *Attracts* Customers to Other Businesses	"Harmful Cooperation"	"Beneficial Cooperation" *[most relevant in practice, as argued in Section 4]*

Figure 6: When do signage restrictions benefit or harm the public?

4. Welfare Impacts of Effective On-Premise Signs

It's obvious that a more effective on-premise sign benefits the business that chooses to display it. When it comes to how best to regulate such signs, however, the real question is whether *others* benefit or suffer when a business displays a more effective sign. If other businesses and the public suffer, what I have called "harmful competition," rules that restrict businesses' ability to display more effective signs can make everyone better off, including businesses themselves. But if other businesses and the public benefit, what I have called "beneficial cooperation," such restrictions can have the perverse effect of making everyone worse off.

In this section, I dig into this essential question of how a business' decision to invest in a more effective on-premise sign impacts others. It's not a simple question, since there are many

different ways in which a sign can be made more effective. Moreover, the type of sign that is most effective – and the sorts of impacts that more effective signs will have – differs depending on the retail environment. For instance, the type of sign that is most effective depends, to some degree, based on roadway conditions, the speed of traffic, the location of the business in relation to the roadway, and so on.

Nonetheless, it is possible to make several general observations about the impacts that installing a more effective sign has on nearby businesses, on motorists, and on others, depending on whether that increased effectiveness is due to better understandability (Section 4.1) and/or easier detectability and increased attractiveness (Section 4.2). As we will see, this analysis has implications for how town leaders ought to design their signage rules and the process by which businesses can seek exceptions (also known as "variances") from these rules (Section 4.3).

4.1 Benefits Created by More Understandable Signs

A sign that is easier to understand[18] also imposes fewer cognitive demands on the viewer. In this way, more understandable signs *free* people to notice other businesses' signs. What this means, in particular, is that *more understandable signs will tend to enhance the consumer discovery process*, by allowing consumers to notice more about their surroundings and hence learn more about the opportunities available to them. In this way, more understandable signs benefit consumers as well as other nearby businesses, as well as the businesses that display them.

Example: Twelve Corners Plaza in Brighton, New York

Consider Twelve Corners Plaza, a shopping center located along Monroe Avenue in Brighton, New York. As you may recall, Brighton was featured in the introduction as a town with relatively stringent rules restricting the size of on-premise signs. Figure 6 below offers a view of a few of the on-premise signs in Twelve Corners Plaza, taken from the parking lot. Four signs are immediately noticeable from this image, but only one is easy to understand at a glance, namely, "PANERA BREAD." The others can also be deciphered – "FEDEX OFFICE," "MUTUAL FUND

[18] A sign that includes text can only be understandable if that text is legible, but greater understandability can also arise from the more effective use of logos (discussed more later) and other meaningful symbols. For instance, people driving past a church who glance at the building are more likely to mentally register a sign in the shape of a cross than one displaying the name of the church itself, because the cross is a well-understood symbol.

STORE," and "STARBUCKS" – but it takes more time to do so, time that one might not have while driving past this shopping center and taking just a quick glance at these stores.

Now, imagine that the FedEx Office store were allowed to increase the size of the letters in its sign, to be as large as the Panera sign is now. Who would this benefit, and who would it harm? FedEx Office and its customers would obviously benefit, but what about the other businesses? First, what about Panera? Previously, consumers were able to recognize Panera "at a glance" but had to struggle to read the others. Now, they can recognize both Panera and FedEx Office at a glance. This leaves Panera no worse off than before and, in fact, most likely benefits Panera since some people who pull off the road to go to FedEx Office will stay to eat at Panera. What about Starbucks or the Mutual Fund Store? These stores likely "win" as well. Since drivers don't need to struggle any more to read the FedEx Office sign, they now have more cognitive capacity to read these other businesses' harder-to-process signs. Finally, and most importantly, it is natural to expect that traffic safety will improve as well, as drivers spend less time trying to read on-premise signs that are too small to be easily understood.

Figure 7: Twelve Corners Plaza in Brighton, NY, August 2015

I'm sure that Brighton's leaders had every good intention in mind when they imposed rules that forced their businesses to display much smaller signs than are allowed in other places. However, in so doing, they have likely harmed not only their local businesses, who lose out on customer traffic, but also consumers, who do not discover all the shopping opportunities that Brighton has to offer or who struggle more than necessary to find Brighton businesses, and the driving public, as more people take their eyes off the road, for longer, to read signs that are too small to easily understand.

Example: Business Logos

Many businesses develop and promote logos to make it easier for consumers to quickly recognize their stores. Because logos do not have to be *read*, they can be quickly recognized with minimal cognitive effort. Consequently, a sign that features a well-known logo is likely to be significantly more "understandable." It's no wonder, then, that many businesses (such as Dairy Queen, seen in Figure 7) display on-premise signs that feature their logo but don't even include the name of the business. This is obviously a good thing for those businesses and, as we have discussed, also typically a good thing for consumers, for other nearby businesses, and for the driving public.

When crafting the rules that govern on-premise signs, then, town leaders ought to design measures that encourage businesses to display their logos. One way to do that, for instance, would be to allow businesses to display signs that cover more total square footage, depending on how much square footage they devote to a logo. As things stand, most towns' codes allow signs to cover a certain amount of square footage but make no distinction between text, logo, or other sorts of content. Unfortunately, by treating logos and text the same, such rules induce businesses to make trade-offs and compromises that may ultimately harm consumers, either by (i) not displaying their logo when they could have or by (ii) displaying their logo but shrinking the other text, causing people to look longer at the sign when trying to read it.

Figure 8: Businesses with well-known logos have a strong incentive to display them

4.2. Benefits Created by More Detectable and More Attractive Signs

When a business displays a sign that is easier to detect and/or that attracts more of those who see it to visit that business, what are the effects on consumers and on other nearby businesses?

BENEFIT – Consumers

By definition, a more attractive sign induces consumers to patronize a business when (with a less attractive sign) they would have chosen not to do so. This is obviously good for the business displaying the more attractive sign, but also means that consumers are better off when signs are more attractive. To see why, consider what consumers *choose* to do, before and after a business invests to make its sign more attractive. When the business has an unattractive sign, the consumer passes by and uses his time doing something else. Once the business displays a more attractive sign, however, the consumer chooses to patronize the business instead of whatever he would otherwise be doing, showing (by his choice) that he *prefers* patronizing the business over whatever else he would have otherwise been doing with his time.

This is what economists refer to as a “revealed preference argument,” that people’s choices reveal what is most valuable to them. The logic of revealed preference is that any new option that people *choose* must be better for them than whatever they previously chose. For

instance, suppose that more people watch a television show once a new actor joins the cast. We would conclude from this that the producers' decision to hire this new actor made the show *better* from viewers' point of view, since they now choose to watch. In the same way, and for the same reason, a business that displays a more attractive sign makes consumers better off, since they now choose to patronize the business.

BENEFIT – Nearby Businesses, Especially in Destination-Shopping Areas

When a business displays a more attractive sign, and causes more consumers to patronize its store, how are other businesses impacted? The most obvious potential impact is that other businesses may be harmed if the consumers who visit the business with the more attractive sign would otherwise have visited them. However, there are also important benefits that other businesses enjoy whenever customers visit a nearby store, as those customers may then come to their stores!

To clarify these countervailing effects, suppose that one business ("Store A") displays a more attractive sign and that "Store B" is another nearby business. Is Store B harmed or helped by Store A's new-and-improved sign? To answer this question, we need to consider what customers would have done if they had not been attracted by Store A's new sign, and what they will do after being attracted by the sign. I call these the "WOULD THEY?" and "WILL THEY?" questions.

1. WOULD THEY? – "Would consumers who are now attracted to Store A have otherwise gone to Store B?"
2. WILL THEY? – "Will consumers who are now attracted to Store A also go to Store B?"

Table 2 below shows the four relevant possibilities, which can be summarized as follows:

Case #1: Store B makes a sale, no matter what. If customers will go to Store B whether or not Store A displays a more attractive sign ("YES they would" & "YES they will"), then obviously Store A's decision to display a more attractive sign has no impact on Store B.

Case #2: Store B does not make a sale, no matter what. If customers will not go to Store B whether or not Store A displays a more attractive sign ("NO they would not" & "NO they will not"), then again Store A's signage choice obviously has no impact on Store B.

Case #3: Store A steals Store B's customers. If Store A's more attractive sign *steals away* Store B's customers ("YES they would" & "NO they will not"), then Store B is harmed if Store A displays a more attractive sign.

Case #4: Store A attracts more customers to Store B as well. If Store A's more attractive sign causes more people to *discover* Store B ("NO they would not" & "YES they will"), then Store B benefits if Store A displays a more attractive sign.

	YES they will	NO they will not
YES they would	NO IMPACT	HARM
NO they would not	BENEFIT	NO IMPACT

Figure 9: How does a more attractive sign impact other nearby businesses?

Which of these four cases is most likely to prevail – and hence whether more attractive signs are likely to benefit, harm, or have no impact on other businesses – depends on the nature of the businesses in question and on the nature of the retail environment. First of all, it obviously matters whether Store A and Store B compete with one another in the sense of competing for consumers' time and shopping experience or, more precisely, whether Store A and Store B are "shopping substitutes" or "shopping complements".

> *Definition: Store A is a "shopping substitute" for Store B if visiting Store A causes consumers to be less likely to visit Store B.*

> *Definition: Store A is a "shopping complement" for Store B if visiting Store A causes consumers to be more likely to visit Store B.*

Nearby stores that sell similar products and compete with one another on *price* need not be shopping substitutes. For instance, consider two jewelry stores located next to one another in a shopping mall. Someone who is drawn into one jewelry store by its attractive sign may then be *more* likely to then visit the other store, to comparison shop before making a big purchase. If so, these jewelry stores are actually "shopping complements" – each benefitting one another

whenever they attract a new customer to stop and shop at either store – even as they compete aggressively on price to win each sale.

When businesses are shopping substitutes, anything that attracts more consumers to one business will cause fewer people to visit other businesses, putting us in the "YES they would, NO they will not" box of Table 2 in which more attractive signs harm other businesses. On the other hand, when businesses are shopping complements, anything that attracts more consumers to Store A will cause more people to visit Store B, putting us in the "NO they would not, YES they will" scenario in which more attractive signs benefit other businesses. The essential question we need to explore, then, is in what sorts of situations businesses tend to be shopping substitutes or shopping complements.

Many factors can affect whether nearby businesses are shopping substitutes or complements. For instance, the jewelry store example above illustrates how nearby businesses will tend to be shopping complements if consumers like to comparison shop before making any purchase. On the other hand, nearby businesses will tend to be shopping substitutes if consumers in their retail space are typically pressed for time, as customers simply don't have the time to visit Store B once they have gone to Store A.

As this discussion suggests, shopping substitutability and shopping complementarity between businesses can arise for two basic sorts of reasons. First, visiting one store may affect the VALUE that consumers get from visiting other stores. This "value effect" can be negative, as when eating lunch at one restaurant takes away one's appetite for lunch at any other restaurant, or positive, as when browsing diamond rings in one store induces customers to visit several other jewelry stores as well. Second, visiting one store may affect the OPPORTUNITY COST that consumers must incur to visit other stores. This "opportunity cost effect" can be negative, as when consumers only have time to stop in one store, or positive, as when a consumer walks into a shopping mall to visit an "anchor store" then finds it convenient to patronize other stores that they would not otherwise have visited.

These effects can in principle go either way, causing businesses sometimes to be shopping substitutes and sometimes to be shopping complements. However, there is good reason to expect that *nearby businesses will typically be shopping complements, especially in "destination-shopping retail areas"* in which customers must first decide whether to travel to the retail area before they can shop in any of the stores there.

<u>Definition</u>: Two stores are in the same "destination shopping area" if (i) customers must incur a significant cost to visit either of them but (ii) once a customer has visited one of them, the additional cost of then visiting the other is negligible.

Why are businesses in the same destination-shopping area typically shopping complements? The reason is simple: once a customer has traveled to the destination-shopping area with the intention of visiting one store, the opportunity cost of visiting all the other stores in that area is now dramatically lower, since no additional travel is required! What this means, in particular, is that a business that displays a more attractive sign typically benefits other nearby businesses, by drawing in more customers to their shared retail area.

Before moving on, it's worth noting how broadly these concepts of "destination-shopping area" and "shopping complements" apply to brick-and-mortar[19] retail businesses. In particular, these concepts apply not just to places like shopping malls and shopping centers where stores intentionally locate next to one another, but to any place where stores are relatively close to one another, so that a customer who travels to one store then finds it relatively convenient to then travel to other stores.

This is likely to be true, in particular, for any two businesses that appear together in a driver's "cone of vision." So, when we think about how businesses within the same cone of vision impact one another through their on-premise signs, we need to do so bearing in mind that such businesses are very likely to be shopping complements, not competing but rather depending on one another to invest in effective signs that draw customers into their nearby retail spaces.

[19] The economics of online retail is entirely different.

Figure 10: An on-premise sign that is both “detectable” and “attractive”

Example: The Hard Rock Cafe’s “Crashed Car Sign”

Consider the Hard Rock Cafe’s famous “Crashed Car Sign,” which resembles the back-end of a car crashing into the restaurant, shown in Figure 8. This on-premise sign is both “detectable,” as people’s eyes are drawn to it, and “attractive,” as it makes people want to go into the restaurant to see what it looks like inside. This sign likely benefits other nearby businesses, by drawing tourists and diners to the area who may then go on to buy things from those other stores. For instance, right across the street from the Hard Rock Cafe in midtown Manhattan is a movie theater (Sunshine Cinema) that shows lesser-known independent films. This movie theater likely benefits greatly by being within eyeshot of the Crashed Car Sign, as many people who come to the area to see the sign then consider whether to watch a film. Even direct “competitors” such as the Bubba Gump Shrimp Company, another restaurant in the same building, probably benefit from the Crashed Car Sign as many people come to see the sign but then decide that they would prefer to eat seafood and go to Bubba Gump.

Indeed, direct competitors often choose to locate close to one another – be they restaurants, jewelry stores, nightclubs, or farmers selling fresh produce – because they all benefit by being in a place that *customers know to go* to get whatever it is they are selling. In the same way, and for the same reason, direct competitors who are clustered together also typically gain when any of them invests in a more attractive on-premise sign.

4.3 An *Exceptions* Solution to the Public-Good / Free-Rider Problem

In a destination-shopping area, any investment that one business makes to attract customers benefits all the other businesses in the area, serving the "public good" associated with making their area a more attractive "destination" for shoppers. Of course, each individual business has the option *not* to contribute to this public good, creating a so-called "free-rider problem" in which each business has an incentive to rely on the efforts of others and invest LESS itself to attract customers to the area than would be optimal for the business community as a whole. The implication of this free-rider problem for on-premise signage regulations is that, if anything, businesses in destination-shopping areas should be *encouraged* to invest even more in their on-premise signs than they already do, to attract even more customers and make these areas as commercially vibrant as they can possibly be.

The notion that businesses free-ride on others' ability to attract customers is well-established, especially in the context of shopping malls, where it has been extensively documented that smaller stores in the interior of a mall benefit when a new "anchor store" moves in. As economics professors Peter Pashigan (U. Chicago) and Eric Gould (Hebrew U. of Jerusalem) explained in the *Journal of Law and Economics* in 1998:[20]

> *Consumers are attracted to malls because of the presence of well-known anchors—department stores with recognized names. Anchors generate mall traffic that indirectly increases the sales of lesser-known mall stores … Mall developers internalize these externalities by offering rent subsidies to anchors and by charging rent premiums to other mall tenants. We estimate that anchors receive a per foot rent subsidy of no less than 72 percent of that which nonanchor stores pay.*

Anchor stores pay so much less – just 28 cents for every dollar paid per square foot by non-anchor stores – because customers are attracted to their stores and, once in the mall to purchase from them, also learn about and purchase from the smaller stores that are their "neighbors."

Shopping malls provide an instructive example for town leaders looking to foster more vibrant and enjoyable shopping districts. After all, most shopping malls are managed by companies, like the Simon Property Group, who have an enormous amount of experience and

[20] "Internalizing Externalities: the Pricing of Space in Shopping Malls" by Peter Pashigan and Eric Gould, *Journal of Law and Economics*, April 1998, available at http://www.jstor.org/stable/10.1086/467386.

know what works when it comes to making a shopping mall an attractive and fulfilling destination for shoppers. Moreover, shopping malls aren't really that different from the other sorts of "destination-shopping areas" that appear throughout a town. All these shopping areas are characterized, at a fundamental level, by "shopping complementarity" which, in turn, creates (i) a powerful *shared interest* among nearby businesses in creating an attractive retail environment but also leads to (ii) a *free-rider problem* in which businesses will tend to invest too little on their own to achieve this common goal.

Shopping malls solve this free-rider problem, essentially, by attracting a few businesses (the anchor stores) that are willing to take a "leadership position" when it comes to attracting customers to the area. Town leaders cannot micro-manage what businesses locate in their towns or what rents those businesses have to pay, like a shopping-mall manager can, but it's clear that – if they could – town leaders would be wise to follow shopping malls' lead. In particular, town's would be well served to attract their own "in-town anchor stores" (or simply "anchors") within each of their destination-shopping areas, stores like Starbucks or Chipotle that many customers already know and will seek out for their own sake. Customers who go to those stores will then naturally encounter and patronize other businesses, enlivening the overall retail scene.

There are actually two issues here. The first issue, which is beyond the scope of this analysis, is how towns can best attract anchors to enter their market and get them to distribute themselves around the town in a way that maximizes the overall vibrancy of the retail scene. The second issue, which is my focus here, is how towns can make the most of the anchors that are already in their town and avoid throwing up regulatory impediments that stop those anchors from realizing their full potential as destination-shopping catalysts. My answer, in a nutshell, is that *towns ought to turn the typical exceptions process on its head* and allow businesses that want to "stand out from the crowd" to do so, under certain conditions and restrictions.

The Dutchess County Greenway Compact (DCGC), in its "Greenway Guide" for on-premise signs, expresses the usual view about exceptions (also commonly known as "variances"), that one ought to only grant exceptions in truly exceptional circumstances:

> *"Sign variances should not be granted lightly, and only under unique conditions and when minimal exceptions will not be undesirable to the character of the community"*

This is a completely reasonable-sounding point of view, but those who hold this view are getting the economics of on-premise signs completely wrong and, I would argue, ultimately harming the

communities they intend to serve. To see why, suppose that some business wants to display a sign that it claims will attract more customers and make the area more interesting and memorable … but this proposed sign *dramatically* violates code, being way too large and hanging out over the sidewalk, like the "Sombrero Sign" shown in Figure 9 below.[21]

Here's how I imagine town regulators following DCGC's advice might approach such a request:

> *"Well, first of all, there is nothing 'unique' about the conditions that this business faces. Sure, it wants to be distinctive and fun, and attract people to the area, but it could have done that anywhere! If we approve this request and allow this super-sized sombrero, pretty soon everyone will be asking for the same thing, and we'll have huge overhanging hats all over the place! It would be one thing if they were asking for a 'minimal exception,' but this sign is a big deviation. There's just no way we can approve this!"*

Figure 11: This "Sombrero Sign" violates code, but should it be denied?

This reasoning is deeply flawed, in several ways. First of all, the notion that other businesses will feel compelled to display equally conspicuous signs, once one business does so, is based on the assumption that nearby businesses are shopping substitutes. But will nearby businesses really be harmed once this sign goes up, and then feel compelled to display their

[21] This sign, which also lit up in a rainbow of colors at night, hung outside the Mexican restaurant Gonzalez y Gonzalez in Greenwich Village in New York City for over two decades, until 2011, becoming one of the most well-known landmarks in the neighborhood.

own outlandish signs just to keep up? That seems unlikely. In fact, as we've seen, nearby businesses are typically not shopping substitutes but actually shopping complements. Nearby businesses will therefore not only tend to benefit from the Sombrero Sign but, if anything, have less incentive to display their own outlandish signs once the Sombrero Sign is up, since then they can free-ride on the Sombrero Sign to attract people to the area. So, it's simply incorrect to assert that granting a variance to one business will necessarily induce everyone else to demand the same sort of exception.[22]

Some businesses' requests for variances ought to be denied, of course, because their proposed signs will be "undesirable to the character of the community." But how should town regulators decide which variance requests to reject on this basis, and which to accept? Simply sticking to the code, and refusing to even consider "non-minimal" variances is clearly not the answer. Codes exist to provide a "safe harbor," indicating to businesses what sorts of signs are *automatically acceptable*, not to define what sorts of signs are automatically unacceptable. Having well-specified safe harbors is important from an economic efficiency point of view, as they allow businesses that are happy to display a code-compliant sign to do so with minimal administrative burden and delay. But equally important is a robust exceptions process, to allow businesses that would strongly prefer to display a non-compliant code to make the case why they should be allowed to do so.

In this exceptions process, how can town regulators separate the non-compliant signs that will benefit the community from those that will do harm? One simple but effective approach is to give other nearby businesses an opportunity to make their own voices heard, either in support or in opposition to granting a variance for a non-compliant sign. Why is listening to nearby businesses a good idea? After all, town regulators are primarily interested in the welfare of their citizens, not the interests of local businesses, per se. Moreover, might businesses have a perverse incentive to torpedo one another's variance requests, in order to stop each other from gaining a competitive advantage? Yes, indeed, they might, but this is not a *perverse* incentive. Rather, it's exactly what we hope businesses will do if, indeed, they compete with one

[22] If the local sign code does not make adequate allowance for signs in general, then of course all businesses will want to receive a variance. For example, if the maximum size allowed is smaller than what is needed for passing drivers to detect the signs displayed in a town, all businesses would like to be granted an exception to display a sign that is big enough to be easily detectable. My point here is that if one business were to get a variance to make their sign even *bigger* than is necessary just to be detected – like the Turkey Hill Sign, the Crashed Car Sign, or the Sombrero Sign – other nearby businesses wouldn't then necessarily feel compelled to respond in kind. In fact, to the extent that one business' sign draws people from the road into a shared retail area, other businesses in that shared area may then have an incentive to display a *smaller* sign that cannot be easily detected from the road but can be seen once consumers have entered the area.

another as “shopping substitutes.” In that case, we trust nearby businesses to oppose competitors’ variances as a threat to their own business. But in this case, when businesses are locked in harmful competition, the community benefits when regulators tamp down on businesses’ competitive impulses and deny most variance requests. (See the discussion in Section 3.)

On the other hand, if nearby businesses were to support a variance request, town leaders will have learned that these other businesses do NOT see the sign in question as a threat to their business, but rather as something that can make their own business even better than before. In this case, when businesses rely on one another for customers as “shopping complements,” the main strategic problem is not “harmful competition” (where the problem is too much business investment) but a “free-rider problem” (where the problem is too little investment). Within that context, the community benefits when businesses that are willing to invest more than the norm are allowed to do so.

Key Points Made in This Section

- Understandable signs benefit drivers, consumers, and other nearby businesses. Rules that discourage businesses from displaying more understandable signs are therefore perverse and likely to harm the communities they are intended to serve.
- Nearby businesses typically benefit each other when they display signs that more effectively induce people to stop and shop, since customers who arrive to patronize one store will then encounter other stores in the same area. This “shopping complementarity” creates a free-rider problem in which businesses have an incentive to invest less in their own signs than would be optimal for the retail area as a whole.
- Recognizing this shopping complementarity, town regulators ought to adopt a more welcoming attitude toward exceptions requests by businesses seeking to display a non-compliant sign. When deciding which variance requests to grant, town regulators ought to heed the views of other nearby businesses, whose incentives to support or oppose a variance are typically well-aligned with the interests of the broader community.

5. Concluding Remarks

In 2005, a Safeway store designer explained in a survey how s/he imagined that businesses could work together with local signage regulators, more cooperatively and more productively, to benefit the communities where Safeway operates: [23]

> *"Some cities think of signage as a nuisance rather than a tool. The cities think it detracts from the community rather than adding to it. If signage is done tastefully and is in scale with the project, it has a useful purpose. If stores were allowed proper signage, it would increase sales and limit the traffic congestion. It would benefit retailers as well as the tax revenue for that community."*

This fundamental commonality of interest – that on-premise signs that are good for businesses also tend to be good for consumers (by enhancing the discovery process), for motorists (by enhancing traffic safety), and for towns (by increasing the vibrancy of the community's retail districts and boosting tax revenue) – emerged as a main theme of this paper's analysis.

Many towns undoubtedly "get it," that they have much to gain by treating their local businesses as partners, rather than as nuisances or adversaries. After all, when nationwide retailers complained in that same survey how they could not display their preferred sign in about one-third of the towns where they operate, they were also saying that they *could* display their preferred sign two-thirds of the time. Those cities and towns whose rules allow businesses to display the most effective signs have a significant advantage over those who do not, both in terms of attracting businesses to their communities and making the most of the businesses that they already have.

The main economic insight developed here – that a business will tend to help other nearby businesses and help the public when it displays its preferred on-premise sign – is somewhat counter-intuitive. After all, when it comes to what *price* a business charges for its goods, there is a natural conflict of interest as the business would prefer to sell its goods at a higher price while consumers would prefer to buy them at a lower price. Because of this conflict of interest, and the potential that businesses may sometimes harm consumers if left completely unconstrained, the Department of Justice and the Federal Trade Commission constantly police

[23] "On Premise Signs: The Impact of Zoning Regulation on Site Performance" by Peter Everett and Michael Hostetler, United States Sign Council Research, 2005

American firms, often stepping in to block anticompetitive mergers and to stop anticompetitive conduct.

We need these “antitrust cops” to stay vigilant on their beat because, at a fundamental level, there is not a commonality of interest between businesses and the public when it comes to the prices we pay. When it comes to on-premise signs, however, business interests are well-aligned with public welfare. So, the last thing we need is for the “signage police” in each community to take on an overly expansive role, seeking as a matter of course to block businesses from displaying the best possible on-premise sign.

The real problem that town regulators ought to focus on more intensively is how to *encourage* local businesses to invest even more in their signs than they already do. High-quality signs that are easily detectable, understandable, and attractive draw customers to the area and improve traffic outcomes. But the businesses that display such signs do not enjoy these benefits themselves, creating what is known in economics as a “free-rider problem,” in which individual businesses do not have enough incentive to invest in a high-quality sign, because such a sign will not bring them individually enough extra business to justify its cost, even though its overall beneficial effect on the whole shopping district is more than enough to justify that cost.

This free-rider problem can be alleviated in at least two ways. First, towns could impose more rules requiring businesses to maintain their signs at some minimal quality level, to discourage businesses from becoming “free-riders” whose low-quality signs harm the other businesses around them. Second, towns should adopt a more open attitude when it comes to sign variances, encouraging businesses to apply for a variance – even a very large one – for signs that other nearby businesses are willing to support. These and other steps could “change the game” of on-premise signage, shifting the relationship between businesses and local regulators in a way that can revitalize our cities and towns and allow our communities to achieve their full potential.

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