Slowing Down the Presses: The Relationship Between Net Neutrality and Local News

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Introduction

In 2011, the FCC released The Information Needs of Communities, a lengthy report on the state of American local news in the world of the internet.\(^1\) The report detailed a legacy media landscape struggling to adapt to the challenges of the internet, and a surprising dearth of online news sources coming in to fill the gap. The report also presented a series of policy recommendations designed to spur a more robust digital news ecosystem. Among them was a brief reference to the “open Internet debate” going on at the time:

The open Internet debate has several implications for news. First, if the Internet were to evolve toward a tiered system in which preferred customers get better service, it could end up privileging certain types of content over others without regard to consumer demand. Public and nonprofit media would be particularly vulnerable, as it is likely that such a structure would reward established, well-heeled companies over less-well-capitalized start-ups, possibly commercial over nonprofits. It also is plausible that a broadband Internet provider with strong political views might wish to minimize the dissemination of antithetical viewpoints. On a local level, one could easily imagine that a cable provider that controls broadband distribution might discriminate against a news website that had published an investigative report presenting that company in an unfavorable light. This would happen not because the companies have naturally bad intent but because they will inherently seek ways to maximize their profit and/or market penetration.\(^2\)

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\(^2\) Id. at 307.
The report’s authors doubtless drew on their knowledge of the media landscape and the extensive fact-finding conducted by the FCC in its 2010 Open Internet proceeding. Their conclusions are certainly plausible. But the report’s main focus was not net neutrality, and it understandably stopped short of providing a detailed analysis of how the unique features of local news made it vulnerable in a world without an open internet.

Six years later, the state of local news media is little better, and rules protecting the open internet are on the chopping block. It is therefore more important than ever to understand the relationship between net neutrality rules and local news. Local news is valuable in its own right: it serves as a watchdog against corruption and incompetence, provides helpful information to people about their communities, and amplifies minority voices that might otherwise be silenced. Small outlets are often technologically unsophisticated and struggle to adapt to a changing world; as such, local news providers also serve as a bellwether for the whole universe of websites and applications that are never going to be the “next big thing,” but that nonetheless enrich the lives of their communities of users. Understanding the relationship between net neutrality and local news can help us to understand how the elimination of net neutrality rules would affect online communities, small applications, and localism on the internet more generally.

This report studies that relationship in detail. In Part I, it examines current trends in local media, with a focus on how the internet is shaping those trends. In Part II, it argues that

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economic forces and the choices made by internet service providers (ISPs) in the past strongly suggest that eliminating net neutrality rules would exacerbate negative trends, and would likely lead to reduced quality, diversity, and choice in the realm of local news. Importantly, the state of local media suggests that while some of the negative impact might come through the sort of intentional discrimination by and direct competition from ISPs that concerned the authors of the 2011 report, the most serious threat to local news in a world without net neutrality would occur incidentally, as the collateral damage of a regime that favors large, established online players and makes it harder for new entrants to break through.

I. The Modern World of Local News

Three key data points encapsulate the crisis in local news reporting. First, local news is still largely an offline experience, dominated by network television broadcasts and regional newspapers. Second, those legacy providers are struggling in the face of declining audiences and plummeting ad revenues, largely caused by the internet revolution. That leads to declining breadth and quality of reporting and to increased consolidation. Third, new entrants have been slow to occupy the space that legacy providers are retreating from.

What makes this a crisis, and not merely the latest story of an industry caught in the crossfire of disruptive innovation, is that local news plays a vital civic role. Local news outlets are often the primary source of information in a crisis.⁴ They have a deep knowledge of local

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political dynamics, and can use it to hold local⁵ and national⁶ figures accountable. They can bring to light astonishing stories from undercovered communities.⁷ For those reasons and others, local news is often beloved by its audience.⁸

The data bear out the civic importance of local news. More thorough local news coverage correlates with more responsive and effective politics.⁹ And members of racial minority groups disproportionately take interest in local news,¹⁰ and are more likely to have

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⁵ See, e.g., Lauren Rozen, Pulitzer Prize Nomination: The Record (Bergen County, New Jersey), META-JOURNALISM (Dec. 8, 2014), http://sites.udel.edu/lrozner/2014/12/08/pulitzer-prize-nomination-the-record-bergen-county-new-jersey/ (describing how The Record, a Bergen County, New Jersey newspaper, broke the “Bridgegate” story that effectively ended Governor Chris Christie’s political career. Ironically enough, The Record’s stories on the topic are no longer available online).


¹⁰ See Amy Mitchell et al., Pew Research Center, Local News in a Digital Age (Mar. 2015), at 57, 60.
sources covering their needs and interests in a robust local news ecosystem. In other words, a society with less local news is likely to be less democratic and less equitable.

A. Legacy Local News Providers Are in Trouble

Television is still very much the dominant player in local news. The Pew Research Center’s 2015 report *Local News in a Digital Age*, the most comprehensive recent look at local news consumption habits, found that across cities of varying sizes, geographies and demographics, well over half of people get their local news from local TV. And while virtually every TV station now maintains a website, most people who get local news from a TV station get it by sitting down in front of a television set—especially in smaller cities.

The story is similar for local newspapers. The local paper was still a major player in each of the cities that Pew examined. Newspaper readers were more likely than TV viewers to access their preferred source online, but across cities the largest bloc of newspaper consumers still get their news in print.

Despite the relative dominance of broadcast and print media in local news, both face grave threats. Nationwide, local news broadcast viewership is steadily declining, and local television station revenue with it. Local newspaper circulation is difficult to gauge

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11 See id. at 106 (“A larger ecosystem, in other words, is not simply a super-sized version of its smaller brethren. It is also a more diverse one when it comes to who is providing coverage and how.”).
12 Local News in a Digital Age, supra n.10, at 39.
13 Id. at 46.
14 Id. at 39.
15 Id. at 46.
independently, but overall newspaper circulation continues to decline sharply.\textsuperscript{17} A 2017 Pew Research Center report shows that total weekday circulation for U.S. daily newspapers – both print and digital – fell 8\% in 2016, marking the 28th consecutive year of declines. Total weekday circulation for U.S. daily newspapers fell to 35 million – the lowest level since 1945.\textsuperscript{18} The drop in circulation and revenue has led to huge cuts in newspaper staffing, which has dropped 37\% since 2004.\textsuperscript{19} Broadcast news staffs have declined more slowly, but they have shrunk over time, at the same time that local TV news stations have increased their output.\textsuperscript{20}

The major cause of these trends is the rise of the internet. In 2011, the FCC’s Information Needs of Communities report identified several ways the internet revolution was undermining the local news business model.\textsuperscript{21} A critically important one is that the internet allows users to view content separately that would previously have only been provided in a bundle, either as part of a local newspaper or a full TV broadcast. Viewers who once would have sat through local news reporting and advertising to get the weather report can now just pull out their smartphone; readers who would have had to subscribe to a full newspaper to get the box scores can do the same. This problem is exacerbated by a free rider problem for news reporting on the internet. Even if there is a solid core audience interested in local news, most stories that are reported online will quickly spread and become accessible to people who have

\textsuperscript{17} Pew Research Center, Newspapers Fact Sheet (June 2017).
\textsuperscript{18} \textit{Id.} ("Total revenue for U.S. newspapers (in U.S. dollars)).
\textsuperscript{19} \textit{Id.} ("Total number of newsroom employees at U.S. newspapers").
\textsuperscript{20} See Information Needs of Communities, \textit{supra} n.1, at 79; State of the News Media 2016, \textit{supra} n.16, at 34-35.
\textsuperscript{21} See Information Needs of Communities, \textit{supra} n.1, at 125-32.
not paid for a subscription.\textsuperscript{22} When a user can find out about news just by checking her Twitter feed, it reduces the economic incentive to pay for news, or even to click over to the local news site that expended resources on the reporting. These factors, among others, have led to plummeting advertising rates online.\textsuperscript{23} And that problem has been compounded by the near-total demise of classified ads—thanks to sites like Craigslist—which were once the most reliable revenue stream for newspapers in particular.\textsuperscript{24}

None of this has eliminated online advertising revenue. To the contrary, digital advertising spending has been consistently increasing in recent years.\textsuperscript{25} But a large majority of spending went to just five companies—Facebook, Google, Yahoo, Twitter, and Microsoft — not to content originators.\textsuperscript{26} Indeed, nearly half of all online advertising revenue goes to Facebook and Google alone.\textsuperscript{27} That presents a business problem for all online content providers, but it is a particular challenge for local news, because users’ consumption habits on social media and search tend to heavily favor national political stories.\textsuperscript{28}

The result of these trends is a hollowed-out ecosystem of legacy local news providers. Most local news broadcasting consists of “anchor reads,” where news anchors simply read out a short bulletin, usually not backed by very much reporting.\textsuperscript{29} A large proportion of local TV
coverage responds to breaking news, when an incident takes place or a politician takes action; very little of it consists of much more resource-intensive “enterprise reporting,” where the station itself investigates and uncovers a story.\(^{30}\) Newspapers are better at generating stories—especially in a large, relatively competitive newspaper market like Denver, where papers can differentiate themselves by discovering and reporting out news in specialty areas\(^{31}\)—but resource constraints increasingly make that work difficult.

Recent years have also seen a great deal of consolidation in legacy media, both within media markets and across them. Over 100 daily newspapers have folded or merged with others in the last fifteen years.\(^{32}\) In many media markets, and across media markets, more and more newspapers are in the hands of the same companies.\(^{33}\) In broadcast, five companies own 37% of all local television stations in the country.\(^{34}\) One of those companies, Sinclair, is in the process of purchasing another, Tribune, which would reduce that number to four companies, and make Sinclair larger than the other three put together.\(^{35}\) The effects of these consolidations are complex, and assessing them in full is beyond the scope of this report. But it is clear that for local news reporting, a greater number of outlets creates a much higher quality and quantity of

\(^{30}\) Id. at 111.

\(^{31}\) Id. at 118-19.

\(^{32}\) State of the News Media 2016, supra n.16, at 9. For a closer look at this process in one media market, see Local News in a Digital Age, supra n.10, at 13-14, describing the merger of the Rocky Mountain News and Denver Post.

\(^{33}\) Id. at 18-19.


\(^{35}\) Id.
In particular, a media ecosystem with a wider variety of platforms does a better job of serving the interests of racial minorities, and people living in parts of the market that might be underserved.\textsuperscript{37}

\textit{B. Online Local News Is Still in Its Infancy}

In many ways, the local news market seems ripe for disruption by new entrants that can use the internet in creative ways to meet the need for local reporting that legacy media increasingly struggles with. And indeed, both legacy organizations and startups have experimented with creative ways to report local news online. But the market is still relatively new, and very few (if any) players have figured out how to turn that innovation into a long-term profitable venture. The same trends that hollowed out legacy media make it difficult to turn a profit in online local news.

A 2015 survey conducted by the Tow-Knight Center for Entrepreneurial Journalism indicates the current state of the local news startup market.\textsuperscript{38} The survey made it clear that local news is a space that entrepreneurs are entering. It surveyed over 90 web-native local news sites, most of which had launched after 2010. Moreover, most of those sites reported year-over-year revenue growth in 2014. But fewer than half of them were profitable, two-thirds had fewer than 50,000 unique monthly visitors, and only a third of them had any full-time

\textsuperscript{36} See \textit{Local News in a Digital Age}, supra n.10, at 106 (“A larger [local news] ecosystem, in other words, is not simply a super-sized version of its smaller brethren. It is also a more diverse one when it comes to who is providing coverage and how.”).

\textsuperscript{37} See \textit{id.} at 122, 126, 128.

editorial staff. Most worryingly, almost all of the local news startups surveyed were heavily dependent on display advertising for their revenue, which is subject to all the negative trends discussed above. In all, the data suggests a market in online local news that is slowly growing, but that is still quite fragile.

That is not to say that online local news will never be sustainable; many successful businesses go through initial periods of unprofitability, and in the online realm especially a lengthy period of losing money while growing a user base and improving the product is common. But it is clear that online local news is still a risky venture, without a proven business model. If local news is ever going to be on long-term sound footing again, it will be by providing content and running a business in ways that have not yet been imagined.

II. Eliminating Strong Net Neutrality Rules Would Make It Harder to Rejuvenate Local News

The struggle of legacy media to adapt to online local news reporting and new entrants to innovate in that market, taken together, are what make net neutrality a vital part of local news policy. The general principle of net neutrality is that internet service providers should be prevented from interfering with applications that travel across their networks. But the net neutrality debate, and the FCC’s Open Internet Order, tends to subdivide that general principle into a set of bright-line rules addressing four main areas: (1) charging access fees to application

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providers or the networks they use to deliver content to broadband ISPs simply to load properly or at all for the ISP’s subscribers; (2) blocking traffic from certain applications altogether; (3) discriminating in the treatment given to traffic from different applications (often called “throttling”); and (4) charging fast lane fees to application providers in return for preferential treatment (often called “paid prioritization”).41 Each of these practices would have effects on local news. In addition, there is currently a worldwide debate over the practice of zero rating—exempting certain applications or classes of applications from data caps. That practice, too, is likely to have a major impact on local news. Other ISP technical actions that have the same effect as these four practices might have a similar impact on local news, of course, and might be covered by the “general conduct rule” in the Open Internet Order. But the clearest, and most unique, impacts on local news are likely to come from access fees, blocking, discrimination, fast lanes, and zero rating.

One crucial point to note is that the effects on local news from a rollback of net neutrality rules would not, by and large, fall into the category of anticompetitive conduct punishable under the antitrust laws. Certainly, ISPs could engage in nakedly anticompetitive conduct, designed to disadvantage content created by independent media and boost content produced by the ISPs’ subsidiaries or partners, by interfering with the transmission of data across their network. But that is not the primary threat to local news in a world without net neutrality. Instead, as will become clear, the real harm to local news would likely be a side effect of non-neutral behavior by ISPs in other areas. That is important for two reasons. First,

the harm to local news can occur even if ISPs proceed entirely in good faith, and do their best to avoid nefarious tactics or sharp dealing. Second, there is little that the FTC or the Department of Justice can do under the antitrust laws to prevent the adverse impact on local news providers. The problem is simply that an internet without net neutrality favors big players that can negotiate effectively with ISPs and spend money speeding up their websites, and reduces content providers’ ability to innovate without permission. That reality would interact with features of the local news business to make it very difficult for local news providers to take the action they need to in order to thrive in a changing market.

A. Access Fees

The biggest threat to local news audience comes from the very real possibility that ISPs will simply charge content providers just for access to ISPs’ subscribers. For instance, Comcast could charge Yelp a monthly fee simply for the Yelp website or application to work for Comcast subscribers. This reverses the model that has been in place in the U.S. since the internet’s inception: end users pay consumer-facing internet access providers to deliver and send the content of their choice, while online services and websites pay for their own connection to the internet. The possibility that ISPs could charge “carriage fees” to edge providers has been a concern since early in the net neutrality debate; Ed Whitaker, who was CEO of SBC and later AT&T, famously said in 2005: “Now what they would like to do is use my pipes free, but I ain’t


\[\text{\textsuperscript{43} See Timothy B. Lee, Comcast is Destroying the Principle that Makes a Competitive Internet Possible, Vox (May 6, 2014), https://www.vox.com/2014/5/6/5678080/voxsplaining-telecom.}\]
going to let them do that because we have spent this capital and we have to have a return on it. So there's going to have to be some mechanism for these people who use these pipes to pay for the portion they're using.”\footnote{Mike Masnick, \textit{SBC: We Own the Internet, So Google Should Pay Up}, TECHDIRT (Oct. 31, 2005), https://www.techdirt.com/articles/20051031/0354228.shtml; see also Paul Taylor, \textit{AT&T Chief Warns on Internet Costs}, FINANCIAL TIMES (Jan. 30, 2006), https://www.ft.com/content/3ced445e-91c5-11da-bab9-0000779e2340 (“I think the content providers should be paying for the use of the network—obviously not the piece from the customer to the network, which has already been paid for by the customer in Internet access fees—but for accessing the so-called Internet cloud.”).} And the possibility hasn’t gone away. In their 2013 challenge to a the 2010 iteration of net neutrality rules, Verizon’s attorney acknowledged that the company should have the the right to charge providers fees to access users and cut them off if they did not pay up.\footnote{Oral Argument at 1:47, \textit{Verizon Communications, Inc. v. FCC}, 740 F.3d 623 (D.C. Cir 2014) (No. 11-1355), available at https://www.c-span.org/video/?314904-1/verizon-v-communications-commission-oral-argument.} Verizon noted that it did not consider blocking a site for non-payment of access fees to be a form of blocking and that it wasn’t opposed to a no-blocking rule that prevented arbitrary cut-off, presumably on the basis of a site or services’ content.

Absent net neutrality protections, ISPs could directly charge local news providers a fee, backed by the threat of blocking their content. For ISPs that also own media companies, this could present competition issues that could be investigated by the FTC. Alternatively, ISPs could arguably dodge that anti-competitive issue by targeting the middle-mile networks that deliver local news providers’ content, along with a huge variety of other kinds of sites, to the broadband providers.

Local news providers, like other commercial websites, pay web hosting companies or a data center to host their website, and in turn, that web host contracts with “middle mile”
networks to deliver web pages to the networks of consumer broadband providers. There are a limited number of middle mile providers—networks that connect web hosts to the guts of the public internet, and connect the public internet to the “last mile,” where ISPs take over and carry traffic into homes or onto phones.\textsuperscript{46} An ISP could start to charge those companies for access to its customers, and the middle mile companies would have little choice but to pay up and pass those costs along to hosting companies. That would make the whole internet a more expensive place for content providers.

News providers also often try to speed up their web pages by relying on Content Delivery Networks (CDNs), networks of servers scattered across the country that host images, videos and graphics in locations that are physically close to consumers, because a shorter physical distance corresponds to a faster download.\textsuperscript{47} Just like the public internet, CDNs need to connect with ISPs to carry traffic along the last mile into consumers’ homes or onto their devices; without net neutrality rules, ISPs could start charging CDNs for the privilege of getting to consumers, dramatically raising the cost of delivering content with speed and reliability. The fees that ISPs could charge for access are limited only to what they can get away with charging.

ISPs incentives and ability to charge access fees are illustrated by the actions of the


nation’s six largest ISPs in 2013 and 2014. In an effort to extract revenue from Netflix, the carriers refused to engage in the customary practice of splitting the cost with middle mile carriers to increase the size of the interconnection point—the physical set of cables where traffic gets handed over from the middle mile carrier to the ISP. As a result, the ports became so congested so that traffic from thousands of sites was inexplicably slow for broadband subscribers, even those who had paid for very fast connections. Subscribers complained in huge numbers, but the ISPs continued to delay traffic from all of these sites until Netflix ultimately agreed to pay them.

In 2013 and 2014, Netflix was the primary target of the ISPs’ gambit. But they were also willing to extract payment from the middle mile providers directly if Netflix didn’t pay up. The fee the ISPs demanded is not public, but Level 3, one of the providers that ISPs wanted payment from, told the FCC that the costs demanded were extremely high and would have required significant price hikes to Level 3’s customers, which undoubtedly include local news providers.

If these access fees became a normal feature of the internet, it would put outlets in an impossible position. Most are too cash-strapped to take on extra costs, but the alternative, being cut off from their audience, would be devastating. As users become acclimated to a world

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49 Id.
50 Id.
51 Id.
without net neutrality, carriage fees could become part of the cost of doing business—a cost local news providers cannot afford.

To be clear, ISPs wouldn’t likely be targeting local news providers; access charges would hit every website, small and large. Netflix was the target of the 2013-14 squeeze, but lots of other sites—including a local school district’s online presence—were collateral damage. And even established local news organizations—let alone local news startups—operate on razor-thin margins, so the increased cost is one they are ill equipped to bear. An internet with carriage fees would cut into already small editorial budgets, and likely push some outlets out of business entirely.

B. Blocking

Blocking refers to technical action taken by an ISP to prevent a user from accessing a particular lawful application or class of lawful applications. If ISPs are permitted to engage in blocking, it will make it harder for local news providers to generate revenue and may also stifle their ability to innovate.

There’s an obvious threat from “content-based” blocking: ISPs could effectively bury reporting that cast them in a bad light. The FCC’s Information Needs of Communities report highlighted this risk in 2011. And there are examples of ISPs taking action along similar lines. In 2005, for example, a Canadian ISP blocked access to a website run by the

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53 See Crawford, supra n.48.
54 See Information Needs of Communities, supra n.1, at 307.
Telecommunications Workers Union in the midst of a labor dispute. In areas where a single ISP is the dominant provider, reporting on that ISP’s operations may very well fall within the purview of local journalists. And there are undoubtedly stories reported in local papers that cast ISPs in a bad light, which ISPs might be tempted to block if they had the power to do so.

There are also subtler threats to local news from blocking, however, which come from actions that are not directly targeted at news reporting. Blocking could dry up local news providers’ revenues, diminish their audiences, and reduce their ability to innovate, all without ISPs ever considering the effect on local news.

Consider the threat to local news revenue that could come from ISP ad blocking. Some ISPs have experimented with blocking online advertisements, both because ads can make the experience of web browsing more unpleasant for the user and as a negotiating tactic to extract revenue from ad firms like Google. If implemented by American ISPs, this practice would be devastating to online local news. The vast majority of revenue for online local news startups

55 See Barbara van Schewick, Point/Counterpoint: Net Neutrality Nuances, 52(2) COMMUNICATIONS OF THE ACM, Feb. 2009, at 31, 32. For another example of an ISP blocking content that cast it in a bad light, see Barbara van Schewick, The Case for Rebooting the Network-Neutrality Debate, THE ATLANTIC (May 6, 2014), https://www.theatlantic.com/technology/archive/2014/05/the-case-for-rebooting-the-network-neutrality-debate/361809/ (“Seeking to stifle speech it perceived as harmful to its business interests, a German ISP blocked access to websites that were criticizing its business practices and offering advice to users affected by these practices.”).


comes from advertising.\textsuperscript{58} Even in legacy media, most online revenue comes from advertising.\textsuperscript{59} Given the already tight margins in online local news, losing this revenue source could sound the industry’s death knell. And even if online advertising is not a long-term sustainable basis for local news, it is clearly a key source of revenue now, which can help local news providers stay on their feet as they seek out new business models.

The threat from blocking to local news innovation is more amorphous, but no less real. The concern in this area is that ISPs will block certain classes of application, for whatever reason, which might turn out to be useful newsgathering or content delivery tools. Advocates for local news emphasize that both quality local reporting and quality presentation of that reporting will be increasingly dependent on technological innovation.\textsuperscript{60} If ISPs block some roads of reporting or storytelling, than it will be harder for journalists to engage in that sort of innovation.

To take just one example, there is a growing worldwide trend of sharing and reporting news stories over messaging apps like WhatsApp, Viber, We Chat, Line, Kakao Talk, and Facebook Messenger.\textsuperscript{61} This trend has not yet reached the United States in a meaningful way, but it is quite possible that it will, and that local news providers might want to try and take advantage of it. They are well positioned to do so, since community news is more likely than

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\textsuperscript{58} See The 2015 State of Local News Startups, supra n.38.
\textsuperscript{59} See generally The State of the News Media 2016, supra n.16, at 52-58.
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other kinds of news to be shared by users and more likely to be discovered through sharing.\textsuperscript{62} But ISPs have strong incentive to block messaging apps on smartphones, and have done so in the past, because they compete with the ISPs’ own texting services.\textsuperscript{63} If an ISP were to block messaging apps, for reasons totally unrelated to local news reporting, it might nonetheless cut off an avenue for local journalism to reach a new audience and find a new revenue stream.

This possibility exists for any number of other communications technologies that local news entrepreneurs might find some creative way to use. The point is not necessarily that local news is likely to find success over messaging apps, but rather that it is impossible to know in advance what technological avenues could be the path to success for local news providers. What is sure is that when user access to a communications technology is cut off at the pass, it eliminates the chance for local news innovators to use that technology as a tool of reporting, and thus reduces their ability to find a successful business model in a changing market.

\textit{C. Discrimination}

Discrimination—differential technical treatment by ISPs of certain applications or classes of applications that falls short of blocking—could have similar effects to blocking on local news. Almost any goal an ISP might want to achieve by blocking an application or class of applications


\textsuperscript{63} See, e.g., Kevin J. O’Brien, \textit{Dutch Lawmakers Adopt Net Neutrality Law}, N.Y. TIMES (Jun. 22, 2011), http://www.nytimes.com/2011/06/23/technology/23neutral.html (“The European Commission and European Parliament . . . as yet have taken no legal action against operators that block or impose extra fees on consumers using services like Skype, the voice and video Internet service being acquired by Microsoft, and WhatsApp, a mobile software maker which is based in Santa Clara, California.”)
can also be achieved by discriminating against that class, and they can be used together.\textsuperscript{64} For delay-sensitive applications like video calling, the effect of slowing down transmission of the application’s data may make it unusable.\textsuperscript{65} Less drastic discrimination can still have the effect of driving viewers or readers away from an application. Evidence suggests that even slightly slower load times, measured in milliseconds, push substantial numbers of users to other sources.\textsuperscript{66} In many cases, therefore, allowing ISPs to discriminate between applications or classes of applications would have similar effects on local news as allowing blocking.

In addition to those effects, however, class-of-application discrimination by ISPs could have large, and almost entirely unintended, effects on local news. There are many reasons ISPs might want to discriminate between classes of applications on their networks. Some of those could be anticompetitive; for example, an ISP who is also a phone service provider has a strong incentive to disfavor online video calling services like Skype and Google Talk, because they cut into the telephony market.\textsuperscript{67} Many of the nation’s largest ISPs are now content providers as well. Comcast owns NBC Universal, which includes NBC, Telemundo and Universal Pictures;

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\textsuperscript{64} See Barbara van Schewick, The Case for Meaningful Net Neutrality Rules, STANFORD LAW SCHOOL, https://www.law.stanford.edu/sites/default/files/publication/259136/doc/slspublic/schewick-statement-20100428.pdf (last visited Jul. 3, 2014), at 4 (Discrimination “is often an attractive alternative to blocking, since it allows an ISP to make certain applications more or less attractive in a less drastic way—obtaining the same effect as outright blocking but at lower costs to the ISP.”).
\textsuperscript{65} See JAMES K. KUROSE & KEITH W. ROSS, COMPUTER NETWORKING: A TOP-DOWN APPROACH (5th ed. 2010), at 601.
\textsuperscript{67} See van Schewick, The Case for Meaningful Net Neutrality Rules, supra n.64, at 5 (“[I]n Europe, many mobile ISPs ban the use of Internet telephony applications such as Skype.”); see also Chris Ziegler, AT&T Only Allowing FaceTime over Cellular on Mobile Share Plans, No Extra Charge, THE VERGE (Aug. 17, 2012), https://www.theverge.com/2012/8/17/3250228/att-facetime-over-cellular-ios-6-mobile-share.
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Comcast also operates its own streaming service. AT&T, already the owner of DishTV, could soon own all of Time-Warner’s media assets, including CNN and HBO. Verizon now owns both AOL and Yahoo’s media sites, and operates its own online streaming service Go90. Without net neutrality protections, these ISPs could discriminate against all video traffic, except for their owned and operated sites.

But some ISPs might also discriminate against classes of applications as a means of network management, allowing them to postpone capital investment in their network. For example, ISPs might slow down video streaming at peak usage times because it takes up a significant portion of their internal network capacity.

This sort of discrimination, however motivated, is likely to make life very difficult for

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71 This focus is arguably shortsighted. Network engineers, including those affiliated with large ISPs, extol the virtues of application-blind management as simpler and more effective than discrimination for network management. See, e.g., David Sohn, Comcast Spells Out Congestion Management Plans, CENTER FOR DEMOCRACY AND TECHNOLOGY, https://cdt.org/blog/comcasts-spells-out-congestion-management-plans/ (Sept. 22, 2008). Nevertheless, it is clear that ISPs continue to use class-of-application discrimination as a network management technique in jurisdictions where it is allowed. See, e.g., Sandvine, “Response to European Commission Directorate-General for Communications Networks, Content and Technology,” Public Consultation on Specific Aspects of Transparency, Traffic Management and Switching to an Open Internet (Oct. 15, 2012) (making arguments for the necessity of application- and class-of-application-specific management); Alissa Cooper & Ian Brown, Net Neutrality: Discrimination Competition, and Innovation in the UK and US, 15 ACM TRANS. INTERNET TECHNOL. 1, 15 (“In some cases, network operators remained committed to discriminatory traffic management despite being aware of its impact on application development and innovation.”).
local news providers. Online video is a large and growing part of local news reporting, and advertising on those videos is a fast-growing source of revenue. Discrimination against video traffic, especially at peak times, will straightforwardly make it less likely that users will see local news videos, and therefore less likely that local news can turn video streaming into a profit source or a site of innovative journalism. Worse still, class-of-application discrimination has been plagued with identification problems, meaning that ISPs that hope to slow down one set of applications often end up catching others in their net. It is not difficult to imagine an ISP attempting to slow down packet-intensive online gaming applications, and incidentally slowing down interactive news reporting projects like KPCC’s Live Fire Tracker in Southern California or WHYY and WITF’s map of Pennsylvania fracking sites.

What makes the effects on local news likely to be particularly injurious is that, as small players, local news providers will not be able to easily anticipate, identify or correct ISP actions that have these effects. ISPs acknowledge the collateral damage that discrimination can cause, and their preferred mechanism for fixing it is working closely with edge providers to accommodate new features and quickly fix unanticipated issues. That approach is difficult enough for large game and video providers, but it is exponentially harder for a diverse and disparate set of local news providers, including local newspapers and small startups. These sites

72 See “State of the News Media 2016,” supra n.16, at 55 (“Video advertising spending increased 46% to $7.7 billion in 2015 and now accounts for 29% of all display ad spending.”).

73 See Cooper & Brown, supra n.71, at 12.


75 See Cooper & Brown, supra n.71, at 14-15.
likely lack the kind of monitoring technology that would even alert them to slowdowns for users across different ISPS. The likely result will be that, even when aware of the problem, local news providers will be unable to get the attention of ISPs when their video streaming or interactive reporting is too slow to be usable. And users will go elsewhere, taking their advertising revenue with them.

D. Paid Prioritization

The charging of access fees to providers for better or faster transmission—sometimes called “paid prioritization” or “fast lanes”—poses the second most serious threat to local news providers in a world without net neutrality. ISPs have long wanted the ability to speed up and slow down websites with corresponding charges to be in the fast lane; in 2013, Verizon told the D.C. Circuit that if it had been allowed to charge online providers for fast lanes, it would not have filed suit against the 2010 Open Internet Order.76

Paid prioritization by ISPs would exacerbate the trends towards unprofitability, unbundling, loss of ad revenue to big players, and consolidation that have put the local news ecosystem in its current precarious position. It would create effects that many local news providers likely could not survive.

The basic problem of paid prioritization is that local news providers face a choice between higher costs or slower speeds. Neither prong of that dilemma is a sustainable option. As described above, slow load times are almost certain to lead to loss of audience, and

consequently loss of advertising revenue.\textsuperscript{77} That problem is especially acute for local news, because the bread and butter of local news are sports and weather—reporting that can easily be gotten from other sources.\textsuperscript{78} In a world of net neutrality, a local news provider might attract readers with a particularly good presentation of hometown box scores or the five-day forecast; perhaps the reader’s eye will be caught by other journalism on the site, thus recreating some of the old cross-subsidy that supported local news for decades. But if the box scores or weather report are slow to load, the reader can easily get them elsewhere.

Local news therefore cannot afford to be slow. But local news providers also cannot pay to be fast, nor do they have a market presence that would allow them to negotiate a low rate for fast lanes with multiple providers. Legacy providers face declining revenues from almost all sources, and startups operate on very thin margins. Raising the cost of running a functional local news website will make investment and effort in that space an even less attractive proposition. It will add a likely insurmountable burden to an already struggling market.

Worse still, paid prioritization poses a risk to new forms of revenue generation with which local news providers are experimenting. For example, there is an interesting trend of local news projects seeking to raise revenue off of crowdfunding websites (and Kickstarter in particular), both for one-off stories and long-term ventures.\textsuperscript{79} Kickstarter has detailed the potentially harmful effects of paid prioritization on crowdfunding efforts of its users, especially

\textsuperscript{77} \textit{See} text accompanying n.64-66, \textit{supra}.

\textsuperscript{78} \textit{See} Local News in a Digital Age, \textit{supra} n.10, at 49.

because video pitches often form an integral part of the search for sponsorship. This is one small part of the funding puzzle for local news, but it illustrates a bigger problem. Local news providers’ ability to seek out innovative revenue streams of all types will be constrained if the cost of doing business on the internet is raised.

And the cost will go up. Of course, some providers will be able to pay to be in the fast lane: namely, big players. Facebook, Twitter, Google, and other large sites remain in favor of net neutrality, but in a world without it, they would almost certainly be willing to negotiate agreements with ISPs to ensure that their content gets to users quickly and with high quality. The FCC’s proposed 2017 Open Internet Order appears to confirm that fast lanes will only be paid for by large, established companies. Similarly, large media companies like Sinclair, Tronc, and the New York Times would likely be willing and able to pay for better service to users. In the short run, that means that local news would find it even harder to compete, as users turn

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80 See Kickstarter, Inc., Comment, In re Protecting and Promoting the Open Internet, FCC, Dkt. No. 14-28 (Jul. 10, 2014), at 3, https://d3mlfyygrfdi2i.cloudfront.net/KickstarterCommenttoFCC.pdf (“If Kickstarter were left in the slow lane, users of our site would be directly impacted. Creators on Kickstarter present their projects through text, photos and, most importantly, video. People from all over the world see these projects and can choose to fund them. It is a basic fact of the Web that in order for videos to be effective and compelling, they must play smoothly. Users will not accept slow load times and choppy videos. If Kickstarter content were slowed or blocked by an ISP, creators seeking funding for their projects would be harmed.”)

81 See Nick Statt, Facebook and Google Will Participate in Next Week’s Big Net Neutrality Protest, VERGE (July 7, 2017), https://www.theverge.com/2017/7/7/15938022/facebook-goolge-net-neutrality-protest-day-of-action-fcc (noting statements of support for net neutrality from Facebook, Google, Amazon, and Netflix, among other companies).

82 Proposal to Restore Internet Freedom, supra n.3, at 143 fn.909 (“We disagree with commenters asserting that this is likely to significantly burden edge providers by requiring them to negotiate with hundreds of ISPs because as discussed, paid prioritization is likely to be focused only on applications with require special QoS guarantees, and even among those providers, is likely to be limited to the largest players.”).
easily to other faster-loading content. But the long-run effects pose the greater risk, in three
distinct ways.

First, pushing users towards social media is likely to create a vicious cycle that deprives
local news of audience and revenue. Already, Facebook alone captures 30% of all display
advertising revenue, and 38% of all mobile ad revenue, with Twitter adding another 5-7%.83
That figure would likely go up if Facebook were in a fast lane. If local news can’t beat Facebook,
the natural impulse would be to join them. After all, community news is already shared at a
fairly high rate on social media, compared to other types of news.84 And Facebook, in particular,
has been pushing content providers to publish directly to Facebook’s platform, rather than host
content themselves.85 If Facebook can guarantee fast speeds, and commands an increasing
portion of advertising revenue, that might look like an attractive proposition to local news
providers. But it is likely to backfire. Evidence suggests that while users may be more likely to
share community news on social media, they are much more likely to view content from
established national outlets, and especially news about national politics.86 Worse still, Facebook
has been experimenting in some international markets with directly charging content providers
to have their posts show up in users’ main feeds, apparently leading to plummeting traffic for
providers that do not pay.87 Needless to say, local news outlets could not afford those
payments. A world where Facebook and other social media platforms are the conduit for an

83 State of the News Media 2016, supra n.16, at 56.
84 See Mitchell, supra n.62.
85 State of the News Media 2016, supra n.16, at 49.
86 See Local News in a Digital Age, supra n.10, at 90.
87 Mix Dimitar, Facebook’s Reach-Killing Test in Slovakia Is a Big Warning to All Media, NEXT WEB (Oct. 23,
even-larger share of news is a world that provides less revenue and less audience to local news.

Second, a regime that favors large players is likely to further the trend toward consolidation in the local news market. An independent legacy provider probably lacks the ability to pay for a fast lane. Likewise a local news startup. But big national media conglomerates do not. In practical terms, this means that local television stations owned by Sinclair, or local newspapers owned by Gannett, are more likely to survive in a world without net neutrality. That is almost certain to lead to further consolidation. Independent local news providers may see getting bought as the only way to stay viable. Media companies looking to expand or merge can argue to the FTC and the Department of Justice that consolidation is not anticompetitive, but rather is a necessary step to deal with rising costs and increase efficiency in dealing with ISPs. And smaller providers that are unlikely to be bought, like alt-weeklies and minority-interest media, will find it harder to compete than ever.

The result of this is likely to be less quality reporting and less reporting that serves the interests of minorities and people with niche interests. Local news ecosystems that have more providers are much more likely to have a diversity of stories, and to serve the interests of undercovered communities and racial minorities.88 Big television stations and large newspapers—especially ones that face little competition—are far less likely to serve those consumers. Ecosystems with lots of outlets are also more likely to produce more enterprise journalism, as outlets seek to differentiate themselves.89 Moreover, outlets owned by large national companies simply have less flexibility and less airtime or print space to cover local

88 Local News in a Digital Age, supra n.10, at 122.
89 Id. at 118-19.
stories in depth. Consider Sinclair’s famous “must-runs,” segments produced by the national company and sent to local stations to run.\(^90\) Those must-run segments take up time in a broadcast that could be devoted to local news, constraining local networks’ ability to do more stories or longer stories and diluting the local focus of the station.

E. Zero Rating

Zero rating—the practice of exempting certain applications or classes of applications from data caps imposed by ISPs—is quickly becoming widespread in the United States, and is the subject of a global debate.\(^91\) Although not one of the three categories of conduct singled out for bright-line prohibition in the FCC’s Open Internet Order, zero rating is clearly not “neutral.”\(^92\) It allows ISPs to create artificial distinctions between different applications and classes of applications; the only difference is that those distinctions are made in the costs imposed on consumers, rather than in the speed or quality of content delivered to them. In practice, ISPs usually do this by creating a platform, on which they then provide access to third-party content. Which content is included in the platform can be at the ISP’s discretion, for a fee, or for any content-provider that meets a set of pre-defined technical criteria.

Exclusion from zero rating programs would be painful for local news providers. Concern


about hitting their data caps is a strong motivator of internet users’ behavior—for example, when *Slate* told readers that a particular podcast would not count against their data caps, it found that they were 61% more likely to click on it.\(^{93}\) Data caps affect both mobile and fixed broadband, as ISPs like Comcast impost them to protect their cable video subscription revenue from cord-cutters. Being left out of the program, therefore, would probably further drain local news’ already diminished audience and revenues.

Of course, if inclusion in zero rating programs is for a fee, than all the concerns about paid prioritization favoring big players are equally applicable here. Given how motivated users are by staying below their data caps, being kept out of zero rating programs poses many of the same risks as being kept out of a fast lane. Given the tight margins on which so many local news providers operate, paying to be included in zero rating programs may not be feasible. The same dynamics as paid prioritization—favoring big, well capitalized platforms—end up being replicated by paid zero rating, with the same risks to local news.

But even non-paid zero rating, the primary focus of this section, favors some providers over others. The effects of that non-neutral behavior in general are hotly debated, and the data is limited.\(^{94}\) In the realm of local news, however, it is likely that zero rating would further intensify economic difficulties, and limit providers’ ability to innovate.

If they are excluded from zero rating, local news providers will see further revenue


drain. That exclusion could be an intentional choice by ISPs, designed to bolster their own video offerings or other content.\textsuperscript{95} In the battle for eyeballs, five minutes a user spends reading a local news website is five minutes she’s not spending watching content provided by an ISP-owned property. That concern is especially acute given the mergers between ISPs and media companies in recent years.\textsuperscript{96}

But local news could also be excluded simply because local news providers lack the resources or reach to negotiate zero rating deals with major providers. The mobile internet, where much of the push towards zero rating is currently occurring, could be a particular challenge for local news providers. Virtually all Americans get their mobile service from just four large carriers.\textsuperscript{97} It could be very difficult for small websites, television stations, and newspapers to negotiate deals with those companies, or even get their attention; that was the experience of small music providers with T-Mobile’s “Music Freedom” zero rating program.\textsuperscript{98} It is also possible that, even for carriers which set no conditions on entry into their zero rating program except meeting certain technical specifications, local news outlets will not have the


\textsuperscript{98} See van Schewick, Binge On, supra n.92, at 27-28.
technical resources to ensure that they meet those specifications—which can be quite demanding—much less to keep pace with changes in the specifications over time.\textsuperscript{99}

But inclusion in zero rating programs would carry its own difficulties. Inclusion in zero rating programs might have some upsides for local news. Indeed, because data caps are such a strong driver of user behavior, and because local news is so often discovered via serendipity, putting local news in a place that users are likely to encounter it for “free” might actually improve local news audience and revenues. On the other hand, there is reason to be skeptical that this effect would be very large. Social media provides an imperfect but useful analogy.\textsuperscript{100}

On social media, users are presented with a wide variety of content, including local news stories, which is all “rated” the same—that is to say, it all counts against their data caps. And on social media, national political stories dominate over local news coverage.\textsuperscript{101} If a similar dynamic played out on zero rated platforms, then local news might not see much benefit.

\textsuperscript{99} See id. at 18-19.

\textsuperscript{100} It is worth noting that Facebook itself is in the zero rating business, through its Free Basics program for developing countries. See Lauren Smiley, \textit{How India Pierced Facebook’s Free Internet Program}, \textit{Wired} (Feb. 01, 2016), https://www.wired.com/2016/02/how-india-pierced-facebooks-free-internet-program/; see also Facebook, Inc., Facebook Counter-Comments, TRAI Consultation Paper on Differential Pricing for Data Services. If, as some prominent telecommunications commentators have advocated, a similar program to Facebook’s Free Basics program comes to the United States, it is very likely that it would drive more users to Facebook—which appears to be bad for local news—and that local news would not fare well even if it were included in the zero rating. See Jon Brodkin, \textit{A Trump FCC Advisor’s Proposal for Bringing Free Internet to Poor People}, \textit{ARS Technica} (May 19, 2017), https://arstechnica.com/information-technology/2017/05/a-trump-fcc-advisors-proposal-for-bringing-free-internet-to-poor-people/ (detailing Trump Administration FCC advisor Roslyn Layton’s proposal for “Free Basics for the USA.”).

\textsuperscript{101} Local News in a Digital Age, \textit{supra} n.10, at 98.
The costs, however, would be substantial. If local news is run through ISPs’ zero rating programs, there is a risk that local news providers will lose a great deal of independence in technical and content decisions alike.

On the technical side, the concern is that local news providers will not be able to take risks in how stories are reported and presented. It is worth remembering that online local news, as it currently exists, is a fragile market that has not yet found a widespread viable business model. It is a market that is ripe for disruption, and that is still experimenting with a wide variety of ways to present stories. But if local news providers look to zero rating as a business model, their ability to conduct those experiments will be constrained. Even the most permissive zero rating programs still limit users to particular technical protocols and particular forms of presentation. They will only allow text, or video, or music, and they will only allow particular data formats and protocols for that content.\(^{102}\) Where does that leave a local news outlet that wants to construct a multimedia presentation including video, audio from interviews, original copies of documents, photographs and text reporting? Or one that wants to create an interactive map tracking crime or natural gas drilling? Or one that wants to stream video in an unconventional format that is also compatible with a device like Roku?\(^{103}\)

The point is not that any of those innovations—and many more that have not yet been envisioned—could not, eventually, be incorporated into a zero rating program by a very

\(^{102}\) See van Schewick, Binge On, supra n.92, at 20-24.

\(^{103}\) See Corey Hutchins, How Local Papers Are Looking ‘Over the Top’ as Part of a New Model for Video, COLUM. JOURNALISM R. (Aug. 18, 2015), https://www.cjr.org/united_states_project/local_news_video_over_the_top.php (describing a local paper that found success doing just that).
permissive ISP. The point is that there would be large delays before a news outlet could successfully achieve that integration, and that the outlet would need to get permission from the ISP to do so, if it wanted to get the benefits of zero rating. More likely, in newsrooms with limited time and resources, the incentive will be to stick to the limited formats zero rating programs allow easily. And the result of that will be a lack of innovation in a space that badly needs it.104

On the editorial side, there is a worrying possibility that zero rating will be used to exert control over the content of local news. This is wholly speculative. But there is some reason to believe that, over time, ISPs might try to push local news coverage of their actions to be more favorable, using zero rating as a cudgel. This could be done unsubtly, by denying access to zero rating programs to outlets that provide unfavorable coverage. More subtly, zero rating could be used as a “pay to play” tool, with participation being conditioned on news sites covering certain stories that are favorable to ISPs or advertisers.105

Effects on local news content from zero rating can only be guessed at. But the effects of raising costs, requiring permission to innovate, and reducing the audience for local news are far more certain. And once again, the result would be a serious burden on already struggling local news providers.

104 See Stencil et al, supra n.60, at 6 (describing the constraints on innovation by local news organizations, and the need for such innovation).
105 Information Needs of Communities, supra n.1, at 91-94.
Conclusion

Local news reporting plays a vital civic function. But to play that role, local news providers need to be financially stable, accessible, and independent. Financial stability ensures that publications can not only fund reporting and keep the lights on, but also can invest in projects that will keep them relevant in the internet age. Consumers’ ability to access local news as easily as other news online ensures that local news does not get lost in the shuffle of the internet. And independence is what makes local news valuable: reporting created by people in a community for people in that community, is more likely to serve their needs and interests, more likely to be well informed about local dynamics, and—when trusted by the community—more likely to keep those with power honest.

An open internet provides a bedrock on which local news providers can build stable, accessible, and independent structures. Net neutrality will not solve the problems facing local news. Doing so will require hard work and ingenuity from journalists, community members, entrepreneurs, and local governments. But net neutrality gives those actors the space to try and solve those problems. In a world without net neutrality, that space will shrink. The cost of online news reporting will go up, and local providers’ ability to offer quality content will go down. There will be fewer legacy outlets, and many of the ones that survive will do so by consolidating, diminishing their independence and the diversity of the local news ecosystem as a whole. And it will be harder than ever for local news startups to fill the space, because the costs of starting an online business will be higher, and the ability to innovate technologically will be constrained.
Local news will survive even if net neutrality goes away. Journalists and community members who care about holding those with power to account and keeping their communities informed will no doubt remain committed to that project. Ending net neutrality will not stop the presses. But it will slow them down.
About the Author

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