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Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street SW Washington, DC 20554

Re: Restoring Internet Freedom, WC Docket No. 17-108

Dear Ms. Dortch:

We write on behalf of the County of Santa Clara (the County) and the Santa Clara County Central Fire Protection District (County Fire) to submit the following ex parte communication regarding Restoring Internet Freedom, WC Docket No. 17-108, to explain the profound negative impact on public welfare, health, and safety that could result from a reversal of the bright-line and transparency rules and Internet Conduct Standard enunciated in the Commission's 2015 Report and Order, *In the Matter of Protecting and Promoting the Open Internet*, WC Docket No. 14-28 (the Net Neutrality Rules).¹

The County serves the geographic region of Santa Clara County, California, generally known as Silicon Valley. Santa Clara County embraces fifteen cities, from Palo Alto in the north to Gilroy in the south, including San José, and is a major employment center for the region, providing more than a quarter of all jobs in the Bay Area. The County provides essential services and governance to 1.9 million residents. Since 2010, the County has invested heavily in developing and implementing systems that provide key public health, welfare, and safety services to the local community over the internet, and has current plans to implement many more such systems. Before the County implemented internet-based systems, it provided some of the services over telephone lines. Some other services were not available remotely at all.

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¹ The County has also submitted a Reply Comment in this matter, and submits this communication to underscore and provide additional detail regarding the views set out in that Comment. *See* Comment by County of Santa Clara, California, ID Number 1083040730347, submitted Aug. 30, 2017.

Established in 1947, County Fire provides fire services for Santa Clara County and the communities of Campbell, Cupertino, Los Altos, Los Altos Hills, Los Gatos, Monte Sereno, and Saratoga. The department also provides protection for the unincorporated areas adjacent to those cities. Wrapping in an approximately 20 mile are around the southern end of Silicon Valley, the Santa Clara County Fire Department has grown to include more than a dozen fire stations, an administrative headquarters, a maintenance facility, and five other support facilities, and covers 128.3 square miles. The department employs almost three hundred fire prevention, suppression, investigation, administration, and maintenance personnel; daily emergency response consists of more than sixty employees. Like the County, County Fire relies upon internet-based systems to provide crucial public safety services.

The County's and County Fire's newly implemented, internet-based services depend, in many cases, on community members' access to broadband internet on nondiscriminatory terms—in other words, they depend on net neutrality principles like those articulated in the Net Neutrality Rules. If traffic to and from these systems is blocked, delayed, or subjected to paid prioritization schemes or other discriminatory practices, the County's and County Fire's ability to effectively provide services to the community would be significantly weakened.

Because many of these systems are used in emergency situations and to protect health and safety, after-the-fact action to address internet service provider (ISP) practices is insufficient to address the harm that the County, County Fire, and the community, are likely to suffer. The potential harm to the County and its residents in, for example, a public health or patient emergency, is severe and immediate and cannot be undone even if discriminatory practices might later be addressed on a post-hoc basis by entities like the Federal Trade Commission. For example, the County's virtual Emergency Operations Center, used by the County and County Fire to coordinate crisis response, relies on contributors' access to the internet on non-discriminatory terms. Interference with this system would cause irreversible damage. Similarly, discrimination by ISPs could degrade the performance of the County's medical health record system, potentially endangering patient safety.

Moreover, the County anticipates that the proposed revocation of the Net Neutrality Rules will interfere with its ability to invest in new, more-efficient methods of providing services in the future. With robust open-internet protections in place, the County anticipates significant growth in systems facilitating citizen participation, like government crowdsourcing and intelligent assistants. In the absence of such protections, however, because discriminatory practices by ISPs threaten the efficacy and value of providing internet-based services, investment, innovation, and development in providing public sector services over the internet—and corresponding benefits to the community—are likely to be markedly hampered. The threat of such discrimination is also likely to interfere with the development of these systems.

As the local government entity that geographically embraces the vast majority of Silicon Valley, the County also is acutely aware that diminished public-sector investment and innovation is far from the only likely impact of reversal of the Net Neutrality Rules. As other local jurisdictions and private-sector entities have noted, start-ups and small companies are likely to suffer particularly from a decision to permit discrimination by ISPs. Startups are a key driver of the economic health of the region, and such discrimination threatens their growth and the economic vitality of Silicon Valley.

As a result of the potential harms to both public welfare and economic development within Santa Clara County, access by the community to broadband internet on nondiscriminatory terms is vitally important to the County. Any harm to the ISPs that might result from the Net Neutrality Rules is likely to be far outmatched by the harm to public entities like the County, County Fire, and the communities they serve. There is little evidence that there is any actual harm to ISPs at all from the Net Neutrality Rules, while the potential harms to the County, County Fire, and the communities they serve are both clear and significant.

I. The County Has Invested Significantly In Innovative Solutions Serving Public Health, Welfare, and Safety That Depend On Nondiscriminatory Access to Broadband.

The County was established in 1850 as one of the first California counties. Today, approximately 1.9 million people reside in Santa Clara County, and rely on the County to provide essential services such as law enforcement, health care, care for the County's youth and elderly, and other social services. The County oversees most public health and public safety functions in Santa Clara County, including emergency planning and disaster response, disease control and prevention, and criminal justice administration. The County also operates roads, airports, parks, libraries, election systems, and other critical infrastructure. Many of the County's programs serve the County's neediest residents, including abused and neglected children, indigent and uninsured individuals requiring health care, individuals who are mentally ill or substance dependent, and those who are physically or mentally disabled.

Since 2010, and particularly over the past few years, the County has invested a significant amount of public money in innovative solutions serving public health, safety, and welfare over the internet. ² The County has anticipated that use of these systems would only expand over time, as residents and community members continue to have increasing access to broadband.

However, this investment and its continuing value, as well as the viability and value of the services themselves, hinge on the community's access to broadband on nondiscriminatory terms. Based on the near-certainty that, in the absence of principles of nondiscrimination like those articulated in the Commission's 2015 Order, ISPs will act in their financial interests and exercise any newfound rights to discriminate, this innovation could be stalled or halted if the Net Neutrality Rules are reversed.³ The innovations that the County has adopted have been developed either by the County itself, or by niche providers serving public entities—not entities likely to have the market power to avoid the worst effects of ISP discrimination.⁴ Moreover,

² It has been widely recognized, including by the U.S. Court of Appeals for the District of Columbia, that the FCC has been policing internet openness since well before the 2015 Order. *See U.S. Telecom Ass'n v. FCC*, 825 F.3d 674, 693 (D.C. Cir. 2016).

³ See, e.g., Oral Argument at 1:54:48, Verizon v. FCC, 740 F.3d 623 (D.C. Cir. 2014) (Nos. 11-1355, 11-1356), https://www.c-span.org/video/?314904-1/verizon-v-federal-communications-commission-oral-argument.

⁴ See, e.g., Catalog of Enterprise Systems published in accordance with California Government Code section 6270.5, CTY. OF SANTA CLARA,

https://www.sccgov.org/sites/scc/gov/Documents/SB-272-Catalog-of-Enterprise-Systems.pdf.

these services, in many cases, benefit low-income and rural communities, which likewise lack the means to avoid the adverse impacts of discrimination.

At a minimum, uncertainty about the future can be expected to have a real and significant chilling effect on innovation benefitting the County and its residents. The County, and the vulnerable communities that it serves, are likely to be particularly and disproportionally disadvantaged.⁵

A. The County Board of Supervisors Relies on the Community's Access to Open Internet for Public Participation and Board Activities.

The County Board of Supervisors (the Board) is the County's governing body, and is the only body that can exercise many of the powers of the County. Public participation in the operations of the Board is both important and encouraged. Indeed, the opportunity for the public to freely and fairly observe and participate in most Board discussions and decisions is guaranteed by California and County law.

An official act of the Board of Supervisors can only be performed in regularly or specially convened meetings, which are subject to the restrictions of the Ralph M. Brown Act. The Brown Act reflects California's commitment to transparency in government, and requires that, with very limited exceptions, all Board meetings be open and public.⁶ It also requires that the public have an opportunity to comment on any item before the Board, and that public entities that have websites post agenda and meeting information on those websites.⁷ The Board itself has adopted additional laws ensuring open meetings and transparency, including a 2011 Ordinance requiring that public meetings of the Board be webcast, and that agenda and legislative materials be made available to the public through the County's website.⁸

The functions of the Board and, as a result, the activities that are subject to the Board's open-meeting requirements, are wide-ranging. The Board performs legislative, executive, and quasi-judicial functions. At a policy level, it oversees most County departments and programs and approves their budgets, supervises the official conduct of County officers and employees,

Because third-party providers often host and distribute County data and services, the County does not believe that it would be possible to isolate and preferentially prioritize its data—even data that is important to public health and safety. The examples of services provided over the internet in this communication are only examples; there are many others. *See, e.g., id.* As a result, the County supports and relies on nondiscrimination in broadband service.

⁵ Although the County's access to the internet generally is not provided under consumer or small-business internet service plans, as discussed below, many of the County's services rely on connections and data transfers between itself and endpoints over which it has no control, which in many or most cases are likely to be served by such plans. In addition, the County relies on consumer-grade internet service in certain situations, including at polling places and parks. Finally, entities that host County services and applications may use consumer-grade internet.

⁶ Cal. Gov't Code § 54950 et seq.

⁷ Cal. Gov't Code §§ 54954.2, 54956.

⁸ CTY. OF SANTA CLARA, CAL., Ordinance No. NS-300.846 (Oct. 18, 2011).

controls the acquisition or sale of County property, and appropriates County funds. The Board also raises local revenue by imposing or increasing local taxes, assessments, or fees. In addition, in some cases, the Board sits as a quasi-judicial body, for example in land-use matters.

The Board also sets local ordinances and regulations. For example, in response to the prevalence of prescription drugs in the community, but the lack of safe, convenient disposal locations for unwanted drugs (and resulting harm to health and the environment), the Board adopted an ordinance regulating drug disposal within the County. In all cases, public comment from interested parties is encouraged and considered by the Board in setting local policies and law; weighing the input of community members, considering the facts on the ground, and adopting an appropriate regulatory approach and framework are key Board functions.

These functions are supported by the County's internet-based services. To ensure that the public has full access to the Board decision-making process, the County uses Accela (formerly IQM2), a provider of public-sector meeting software and services, to provide remote public access to its public meetings, legislative materials, meeting schedules, and Board agendas. The Board provides a live webcast of its meetings, which is accompanied by closed captioning. Board meetings are also made available to the public using this service after the meeting concludes; after the meeting, meeting video and documents are synced to provide easy access to items of interest. Accela is a niche provider, offering productivity and engagement solutions for public-sector entities.

The County also relies upon the Municipal Code Corporation (Municode)—a small provider of government records access, specializing in municipal codes¹³—to host its Ordinance

⁹ CTY. OF SANTA CLARA, CAL., Ordinance No. NS-517.91 (Apr. 11, 2017).

¹⁰ In addition, California campaign finance and conflict-of-interest laws require public disclosure of certain campaign finance and financial interests. *See* Cal. Gov't Code §§ 87200 *et seq.*, 84100 *et seq.* State law requires some disclosures to be made online to promote transparency and public access. *See, e.g.*, Cal. Gov't Code § 84600 *et seq.* The County relies on SouthTech Systems's eDisclosure and Netfile to manage and host these filings. *See Welcome to Santa Clara County eDisclosure*, EDISCLOSURE,

https://www.southtechhosting.com/SantaClara/eDisclosure/ (last visited Dec. 5, 2017); *Public Portal for Campaign Finance Disclosure*, CTY. OF SANTA CLARA,

http://public.netfile.com/pub2/Default.aspx?aid=SCC (last visited Dec. 5, 2017). Netfile provides hosted e-filing and administration forms for campaign disclosure forms and statements of economic interests for local California governments. *See About Us*, NETFILE, https://netfile.com/Content/AboutUs (last visited Dec. 5, 2017).

¹¹ See Board of Supervisors & Boards and Commissions, CTY. OF SANTA CLARA (2017), http://sccgov.iqm2.com/Citizens/Default.aspx (last visited Dec. 5, 2017).

¹² IQM2 Intelligent Meeting Management, IQM2,

http://www.iqm2.com/Downloads/IQM2%20Brochure.pdf; *About Us*, Accela, http://www.accela.com/company/about-us (last visited Dec. 6, 2017).

¹³ See MUNICODE, https://www.municode.com/ (last visited Dec. 5, 2017).

Code.¹⁴ Through Municode, the County is able to make its laws and regulations accessible to the public for free online. Citizens' free and fair access to the law is obviously of paramount importance.

Blocking, throttling, paid prioritization, and other discriminatory practices threaten these investments, as well as the viability of future developments in this area and the small companies that provide these innovations. Niche providers of public-sector services will be less inclined to invest in novel, internet-based approaches to providing government services. Moreover, even if paid priority or other paid options were made available to local governments or citizens, already-stretched public entities will struggle to pay a premium (burdening the taxpayers) for prioritization of their content. Citizens are not likely to pay a premium for access to local government content. If the public finds it cumbersome or impossible to access County content, civic participation through these channels can be expected to diminish. In addition, ISP discrimination threatens innovation in this area; no local government entity can be expected to continue to heavily invest in methods of promoting public participation and transparency that have been, or may be, rendered significantly less effective.

B. The County Office of Emergency Services Relies on the Community's Access to Open Internet for Emergency Response.

Under California's emergency management framework, the County Office of Emergency Services (OES) is the lead emergency management agency for the entire Santa Clara County Operational Area (Op Area), which encompasses the geographical region of Santa Clara County and all the local jurisdictions—including cities, towns, and special districts—within it. In its lead Op Area role, OES's core function is to promote, facilitate, and support the efforts of the County and other Op Area entities to prepare for, respond to, and recover from disasters, emergencies, and complex incidents of all types—including both natural disasters, such as earthquakes, and manmade incidents and events, such as terrorist attacks. OES is also responsible for direct emergency management in the unincorporated areas of the County. This includes determining resource priorities and coordinating the response during a proclaimed emergency.

OES has invested heavily in internet-based systems that are critical to public safety. For example, since 2011-2012, OES has used Intermedix's WebEOC solution as the lynchpin of its emergency coordination and management efforts. WebEOC aggregates information regarding active emergency situations, permitting the County's situational awareness during emergencies and response and recovery coordination. Before implementation of WebEOC, the County had no technology-based system for situational awareness.¹⁵

https://library.municode.com/ca/santa clara county/codes/code of ordinances.

¹⁴ See Code of Ordinances, CTY. OF SANTA CLARA (2017),

¹⁵ County Fire uses many of the same systems as OES, including WebEOC, AlertSCC, CalOEC and CalCOP and joins in the County's concerns and comments. County Fire also uses additional web-based tools to ensure public safety, including social media, Interra/iMap (Situational Awareness), CrewSense (staffing tool), XSC.sccfd.org (Mutual Aid), ROSS (Mutual Aid)

WebEOC is activated in connection with both large and small events threatening public safety, and is used by responders across Santa Clara County. For example, it was used to coordinate response to the 2017 San José winter storms and flooding; it has also been used during planned hospital outages. In an emergency, personnel for the County, cities within the County, regional hospitals, and others log in through a web interface and populate, monitor, and act on situational data in the system. City and other on-the-ground personnel enter data on local conditions—for example, reporting fire boundaries, flooding, or injured individuals. Entities with relevant resources, such as hospital personnel, enter their status information—for example, number of available beds. County personnel allocate, obtain, and dispatch resources based on this information.

WebEOC is designed to aggregate data from diverse sources, and to be used by emergency personnel over any connection, without regard to ISP or network. The County cannot predict where those who must respond in an emergency will be located; critical personnel are likely to be accessing the system from their personal devices, from home, or from the field. The system is designed to provide a virtual emergency operations center. As a result, discrimination in provision of broadband service could fundamentally disrupt the operation of this system.

OES also uses AlertSCC, a web-based public alert system operated by Everbridge, Inc., to notify the public of public safety hazards and recommendations. AlertSCC provides immediate contact with members of the public via email, text, or phone on matters such as evacuation or shelter-in-place orders, fires, unhealthy air quality, and excessive heat warnings. The County's system is also used by each of the cities within the County, and can be used to provide targeted notifications. As recent experience in California with failure to receive timely evacuation orders has shown, time and ready availability are of the essence in access to the information distributed by AlertSCC. ISP discrimination threatens the immediate availability of messages sent over this system.

Discrimination by ISPs could undermine the County's investment, the efficacy of the County's emergency responses, and the public's access to information in an emergency. Because the County is the lead emergency management agency in the region, and provides the platform used by the local jurisdictions and hospitals in the area, if the County's systems or access to them are compromised, the effects could be dramatic. In addition, if the County's electronic systems were rendered less effective, or if there was a significant risk to their effectiveness, the County would be forced to consider whether to maintain its investment in WebEOC and AlertSCC, and whether to continue to invest in such solutions in the future. The

Staffing State/Feds), ImageTrend (EMS) and many other public facing, web-based tools. These tools are all designed to be accessed by emergency personnel without regard to location, ISP, or service plan. Such access, as well as instant (or near-instant) information transfer, is necessary for County Fire to properly perform its duties. All of these tools are web-based and provide instant access to information that saves lives, informs staff and the public of current, critical information that helps them to know exactly what to do or helps them make intelligent decisions about emergency conditions that are "live." Personnel, who use these tools, can use them on personal smart phone devices at their own costs and data connections.

County also anticipates that private investment in development of such systems would be chilled, giving the County fewer options, even if it decided to continue to invest.

C. The County Public Health Department Relies on the Community's Access to Open Internet to Protect the Public Health and Communicate in Emergencies.

The mission of the County Public Health Department (Public Health) is to promote and protect the health of the County's entire population. None of Santa Clara County's fifteen cities have a health department. All fifteen cities, and all the County's residents, rely on Public Health to perform essential public health functions. In the absence of nondiscriminatory internet access, the ability of the County to respond to, identify, and address public health emergencies could be significantly harmed by discriminatory ISP practices.

Among other things, Public Health is responsible for safeguarding the public health by preventing and controlling the spread of infectious diseases and planning for and responding to public health emergencies. The Public Health Department receives reports on eighty-five different diseases and conditions; tracks overall trends in infectious diseases; investigates individual cases of individuals who contract such diseases; provides long-term case management for certain individuals (e.g., active tuberculosis cases); investigates how individuals came to contract diseases; provides immunizations and preventive therapy; identifies, investigates, and controls outbreaks; conducts HIV and other STD testing and education for vulnerable communities; and plans for and responds to public health emergencies.

Like other departments across the County, Public Health is developing and using innovative methods of providing core governmental services that are broadband-based. In some cases, critical information that was once provided by telephone has moved to broadband-based systems. The County anticipates that these operations could be significantly compromised or degraded by the reversal of the Net Neutrality Rules. In addition, reversal is very likely to chill future innovation in this area—and the better, more-efficient provision of services that is enabled by the open internet.

Public Health is responsible for alerting, and, if necessary, mobilizing, the 8,000 medical and public health providers in Santa Clara County who must respond in a public health emergency. Public Health also alerts these providers, or a subset of them, in the case of developing and non-emergency public health situations. Historically, Public Health has used a fax-based system to contact these providers. Web-based solutions enhance existing systems and are necessary for the rapid communication of alerts—particularly considering that fax-based solutions can take a day and a half to alert all providers of a developing situation. Health alerts, which provide information such as widespread influenza activity or increasing reports of certain diseases in the area, must be disseminated as soon as possible. Significant delays are a major impediment to effective notification and jeopardize safety during life-threatening events.

To increase the efficacy and efficiency of this alert system, the County is transitioning to a web- and internet-based system, using MailChimp. Once implemented, alerts will be distributed via email using the cloud-based MailChimp platform, including to individuals accessing the internet through home and small-business internet service plans. The County anticipates that the platform will serve the same volume of providers or higher and will be more

efficient for County employees and more convenient for providers. Community access to an open internet is critical to the County's implementation of this alert system.

In addition to provider alerts, Public Health already communicates vital information via the internet, in ways that could be affected by a reversal of the Net Neutrality Rules. In the event of a public health emergency, the public relies heavily on the Public Health website for emergency information, including what action to take, during the crisis. The website includes information such as where to seek shelter in the event of a wildfire, or where to get a vaccine in the event of an outbreak. Indeed, the department website is used so heavily that it was critically overloaded during the 2009 H1N1 virus emergency. The day after information regarding H1N1 was posted to the County website, within a two-hour period, the County's public portal website became overloaded with individuals seeking information from the website, requiring Google to mirror the site. In addition, the department uses social media to communicate information about public health situations to the public, and Google search analytics to help predict what may or may not be occurring in the community during an outbreak.

Public Health also gathers and monitors extensive syndromic surveillance data using the internet, to keep abreast of nascent and full-blown public health incidents. Syndromic surveillance is a process that regularly and systematically uses health-related data in near real-time to make community health information available to public health officials and government leaders for decision-making as well as enhanced responses to hazardous events and outbreaks. Since 2006, the County has used the Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE), which transmits data via the internet to monitor and provide alerts on increases in the occurrence of diseases and outbreaks.

The system receives real-time encrypted syndromic surveillance data from emergency departments from eight of the eleven hospitals in the County (only one of which is a County-run hospital). For example, the data collected may show a spike in people presenting with certain symptoms, indicating a potentially hazardous event or outbreak. ESSENCE generates reports based on this data and, if there is a pattern, the Public Health Department responds with measures appropriate to the situation. The department relies on the information being in near real-time so that it can identify and respond to a potential public health emergency. The proper operation of this system, and its expansion, may be threatened by the revocation of the Net Neutrality Rules, which threatens to undercut the ready access to data from participants.

In all of these cases, the systems rely on community members' access to broadband without discriminatory practices like blocking, throttling, or paid prioritization. Immediate, or near real-time, information, without regard to the ISP or service plan used by the community member, is of the essence in effective use of these systems.

D. The County Health and Hospitals System Relies on the Community's Access to Open Internet to Provide Patient Care.

The County's hospital, Santa Clara Valley Medical Center (VMC), was founded in 1876 and is a fully integrated and comprehensive public health care delivery system. It provides critical healthcare to residents of Santa Clara County regardless of their ability to pay. It is the only public safety-net healthcare provider in the County, and the second largest such provider in

the State of California. Generally, safety-net providers like VMC have a primary mission to care for the indigent population and individuals who are uninsured or underinsured, or are on Medicaid.

VMC operates a 574-bed hospital, eleven ambulatory care clinics, and four medical and dental units, along with specialized centers that provide trauma, burn, rehabilitation, renal, and ambulatory care. It has over 6,000 employees, including 350 physicians who train 170 residents and fellows per year as a graduate medical education provider and teaching institution. VMC is a Level 1 Adult Trauma Center (the only one in the region) and Level 2 Pediatric Trauma Center. Its burn and rehabilitation centers have been nationally recognized, and its ambulatory specialty center, renal care center, and acute inpatient psychiatric unit are state of the art. VMC provides a full range of health services, including emergency and urgent care, ambulatory care, behavioral health services, comprehensive adult and pediatric specialty services, the highest-level neonatal intensive pediatric care unit, women's health services, comprehensive hematology/oncology services, and other critical healthcare services for all county residents, regardless of their ability to pay.

VMC provides the vast majority of the healthcare services in Santa Clara County that are available to poor and underserved patients. In fiscal year 2016, there were nearly 800,000 outpatient visits to VMC's primary care, express care, specialty clinics, and emergency department, and nearly 125,000 days of inpatient stays in the hospital. Patients who are uninsured, reliant on California's Medicaid program (Medi-Cal), or on Medicare were responsible for approximately 90% of outpatient visits and approximately 87% of inpatient days.

The County Health & Hospital System has made, and is planning to make, significant investments in innovative technology—particularly in the areas of telemedicine and electronic medical records—to improve the way it serves patients. Because VMC has a significant percentage of patients who are indigent, uninsured, or underinsured, these investments have and will have a particularly high impact on the County's ability to serve its low-income and underserved patients. But these investments would be significantly undermined by a reversal of the Net Neutrality Rules.

For example, the County is planning to invest hundreds of thousands of dollars to expand its use of telemedicine to include a telehealth application for high-definition video. This video solution will allow clinicians to connect with, diagnose, and treat patients through a broadband connection. It will also afford them the ability to triage the most critical situations and improve outcomes, including in time-sensitive situations (such as strokes or vehicular accidents) where immediate diagnosis can literally mean life or death. It will also enable health providers to see more patients without spending less time for each patient, reduce wait times, and lower costs for the County. It will allow providers to avoid high-risk situations such as in-person treatment of jail inmates. Access to broadband internet without discriminatory practices like blocking, throttling, or other interference with traffic is essential for this investment to be worthwhile and beneficial to patients and providers.

The County also relies upon partners' access to broadband internet free of discrimination in administering and using its medical records system, Epic. The County has invested hundreds of millions of dollars in Epic to meet the critical need for medical providers to have constantly

updated access to patient medical records.¹⁶ The system uses a large amount of bandwidth due to the volume of data transferred—it has been used to connect and exchange records with more than 28,000 clinics, more than 1,200 hospitals, and more than 1,300 emergency departments. In 2016, it was used to exchange more than two million patient records. Ready access to these records is particularly important to the hospital's emergency department, which may see a patient on an emergency basis, but have no VMC-based patient record. Because the system is populated by thousands of partners, the terms of those partners' access determines whether the system operates as intended. Interference with free and open access could lead to negative patient outcomes, endangering lives, and would reduce the value of this investment.

The County also has invested in technology to enable doctors to access hospital resources when working remotely. The County uses Citrix remote desktop software to allow doctors to access hospital resources through a secure connection. These resources include access to patient records, as well as clinical applications including IMPAX (Radiology), Cyberren (Renal Care), Variant (Nuclear Medicine), CNEX (Cancer Registry), EndoWorks (Gastroenterology), and Trauma One (Public Health EMS and VMC Trauma Center). The County has invested in Citrix, a real-time, high-bandwidth technology to ensure that doctors can access critical data, even when off-site—for example, while on call. However, to the extent that they are blocked, throttled, or otherwise hampered in their access to the system, patient health may be poorly served.

Reversal of the Net Neutrality Rules threatens all of these systems, and the development of new systems to better serve individuals in the County's hospital.

E. County Law Enforcement Relies on Community Access to the Open Internet to Communicate Investigatory and Public Safety Information.

The Sheriff's Office serves the entire Santa Clara County area, enforcing criminal laws in the unincorporated area of the County, which spans approximately 600 square miles; serving as the municipal police department in three cities within the County; and offering contractual law enforcement services to Stanford University, the Santa Clara County Superior Court, the Santa Clara Valley Transportation Authority, and other local agencies. The Sheriff's Office has more than 1,700 employees, including 1,300 sworn peace officers. It investigates thousands of suspected crimes each year and operates specialized units and teams, including the Search and Rescue Team, the Hostage Negotiation Team, the Narcotics Task Force, and the Bomb Squad.

The core function of the Sheriff's Office is to maintain peace in the County, prevent and respond to unlawful disturbances, make arrests as needed, protect victims, and investigate criminal offenses. In addition, in conjunction with the Department of Correction, the Sheriff operates the County jails. The County jail system is the fifth largest in California and among the twenty largest nationally, with approximately 48,000 annual bookings and an average daily jail population of more than 3,600 inmates. Some of these inmates are in pretrial custody, while others are serving sentences in local custody after conviction. On average, inmates stay in the jail for 206 days.

¹⁶ Epic is also used in the County Jail and Behavioral Health Department.

Over the past several years, the Sheriff's Office has developed internet-based tools to improve its operations. For example, the Sheriff's Office, along with other law enforcement agencies, has been moving toward sharing investigation and other law-enforcement data using the internet.

The Sheriff's Office is part of the South Bay Information Sharing System (SBISS), a law enforcement information-sharing collective of four counties in the South Bay region: Santa Clara County, Santa Cruz County, Monterey County, and San Benito County. SBISS was created to, among other things, develop and implement a regional justice information-sharing system for law enforcement and justice agencies throughout the region. Since 2010, SBISS has used COPLINK, a web-based information sharing and analysis platform, to share thirty-eight data sources across thirty-one regional law enforcement agencies, including crime reports, field investigations, citations, mug shots, and arrest reports. The SBISS South Bay COPLINK node is also connected to fourteen other regional COPLINK nodes throughout California, Washington, Oregon, Arizona, and the National Data Exchange Program. Users in COPLINK are able to search data in these connected nodes as well as in the SBISS South Bay COPLINK node. In addition, the County Automated License Plate Recognition (ALPR) system connects twenty vehicles from nine police departments that send records to the SBISS ALPR server. These license plates are searchable in both the SBISS ALPR system and in the SBISS COPLINK system. This data-intensive system relies on free and speedy access by participants so that law enforcement agencies can readily share and obtain information that is necessary to ensure public safety.

In addition, the Sheriff's Office is undergoing a major effort to upgrade its jail management system to a broadband-based system. The office currently uses the County's integrated Criminal Justice Information Control System (CJIC) to support the end-to-end adult criminal offender process in the County, from arrest through incarceration, adjudication, and post-conviction activities. CJIC is used by over 4,000 individuals in forty local, state, and federal agencies. CJIC interfaces with multiple agency and department systems to provide access to key data for operational processes. In addition, CJIC provides batch, online, and ad-hoc reporting to assist in analysis of criminal justice trends and management analytics. CJIC is one of the most important tools that enables the efficient and effective performance of criminal justice processing in the County. The new jail management system will employ fiber, broadband, and cellular-based access, and will connect to the Probation Department, District Attorney's Office, courts, and other law enforcement agencies through an internet-based portal. The new system will eventually replace most functions of CJIC. The system was developed with the goal of allowing ready communication among law-enforcement entities using the system.

In both cases, to the extent that users of these systems do not have access to broadband free of discriminatory practices by ISPs, the fundamental purpose of the systems—coordination of law enforcement in service of public safety—could be threatened.

In addition, in its jails, the County is transitioning its inmate calling services from a telephony-based system to one that will be, at least in part, broadband-based. The County is pursuing a Request for Proposals for tablets, which will enable video calling over the internet, as well as access to educational content. This initiative represents an effort to pursue

nontraditional, modern methods to serve the needs of inmates and family members as well as the Jail.

County law enforcement also uses the internet to communicate critical inmate-release information to vulnerable victim populations. The County Office of the District Attorney, Victim Services Unit, and the Office of Pretrial Services promote the use of VineLink.com as a means for victims and citizens to track the custody status of an adult offender in County jail. VineLink.com provides victims a way to receive up-to-date incarceration and criminal justice data; victims can receive automated notifications about changes in custody status. The efficacy of this system would be undermined if victims are unable to access this information due to blocking, throttling, or other interference with ready access.

All of these systems could be undermined by a reversal of the Net Neutrality Rules, as could development of additional systems to serve public safety and welfare.

F. The County Roads and Airports Department Relies on Community Access to the Open Internet to Communicate Road Conditions and Obtain Information on Road Hazards.

The Roads and Airports Department operates and maintains the County's expressways, unincorporated roads, and two general aviation airports. It operates and maintains more than sixty miles of expressway and hundreds of miles of rural and urban roadways in unincorporated areas, including more than 160 bridges, more than 160 signalized intersections, thousands of street lights, and roughly 25,000 regulatory signs. The Roads and Airports Department permits citizens to report hazardous road conditions via the internet, through the Roads website, or mobile applications. Failure to know about hazardous conditions threatens traveler safety and the flow of commerce.

G. Other County Applications Rely on Community Access to Open Internet.

The County also relies on the internet to provide residents with crucial social service information, including information on the foster care system, family and children's services, adult protective services, benefits services, and child support services. Through its online resources, the County allows citizens to manage their financial transactions with the County, such as paying property taxes, child-support payments, court-ordered collections, medical collections, traffic court collections, legal collections, and public assistance and welfare debts. Citizens further depend on County internet-based resources for a wide range of issues, like submitting consumer protection complaints, making appointments and reservations with county departments, viewing live video of road conditions, finding and applying for County jobs, obtaining County Requests for Proposals, identifying volunteer opportunities, making parks reservations, and scheduling visits with jail inmates. The County is currently working to expand these systems, including developing online permitting systems. If citizens do not have access to broadband internet free from discriminatory practices like blocking, throttling, or paid prioritization, their access to these central county services will be seriously endangered.

The County also operates a number of mobile applications designed to facilitate communication with residents on matters of public health and civic engagement such as

environmental hazards, voter information, vector control and pest abatement, and restaurant safety. For example, the County operates the Weed Hazard Mobile App which allows residents to report and upload photos of hazards directly to the County. This app also allows citizens to receive responses from the County regarding their submissions. The ease of public reporting of such hazards reduces the risk of devastating disasters, such as grass and brush fires. Additionally, the County operates the SCCDineOut Mobile App, which provides easy access to food facility inspection results for establishments within the County. This app provides geolocational information to the public and dynamic information regarding facility safety and inspections. The SCCDineOut Mobile App also allows users to directly contact the County Department of Environmental Health. The County's mobile apps, which create communication streams with the public for crucial health and safety information, rely on the public's ability to secure internet access that is not threatened by discriminatory practices. Obstruction of the public's access to broadband internet threatens the efficacy of the County's apps, and presents risks to the health and safety of County residents.¹⁷

II. Important Private-Sector Innovation Is Also Likely to Be Chilled.

As set out in its Reply Comment in this matter, the County also strongly believes that the Net Neutrality Rules are crucial to the region's economic development and prosperity. The County agrees with the many private and governmental entities that have pointed out the harm to innovation and investment in the private sector—particularly to startups—that would result from reversal of the Rules.¹⁸ The County also agrees with these entities that any hypothetical harm to ISPs is likely to be dramatically less than the harm to edge providers and the public.

¹⁷ This communication provides examples, not an exhaustive list, of relevant internet-based services. Given the scope of the County's functions and the County's recent shift to internet-based systems, reliance (and plans for reliance) on the open internet is extensive and permeates the County's operations.

¹⁸ See, e.g., Comment by Engine, ID Number 10718438817134, submitted July 12, 2017; Comment by the Internet Association, ID 107170915330188, submitted July 17, 2017; Comment by Mayor Edwin Lee et al., ID 10712307619992, submitted July 12, 2017; Comment by City of Portland, Oregon, ID 107142648709933, submitted July 14, 2017; Reply Comments by Engine, ID 10830449823116, submitted Aug. 31, 2017.

III. Conclusion

For the foregoing reasons, among others, ¹⁹ the County and County Fire strongly believe that the Net Neutrality Rules are critical to ensuring the health, safety, and welfare of the communities they serve.

Very truly yours,

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¹⁹ This communication does not address the Draft Order in this matter released on November 22, 2017 and should not be seen as agreement with or waiver of any position related to that draft.