Date of Hearing: April 10, 2024

ASSEMBLY COMMITTEE ON COMMUNICATIONS AND CONVEYANCE Tasha Boerner, Chair AB 2369 (Jim Patterson) – As Introduced February 12, 2024

SUBJECT: Broadband: fixed wireless study: Little Hoover Commission

SUMMARY: This bill would require the "Little Hoover" Commission to conduct a study on the use of fixed wireless and other technologies to bridge the digital divide and report to the Legislature with recommendations based on the study.

Specifically, this bill:

- 1) Requires the report to be submitted to the Legislature on or before January 1, 2027.
- 2) Requires the report to be submitted to the Legislature in compliance with Section 9795 of the Government Code.
- 3) Provides that the statutes established by this bill are repealed as of January 1, 2028.

EXISTING LAW:

- Establishes requirements for submitting reports to committees of the Legislature or Members of either house of the Legislature. The requirements include, among other requirements, a written copy to the Secretary of the Senate, an electronic copy to the Chief Clerk of the Assembly, and an electronic or printed copy to the Legislative Counsel. (Government Code § 9795)
- 2) Establishes the California Advanced Services Fund (CASF) in the State Treasury.
- 3) Requires the commission to establish specified accounts within the CASF (Public Utilities Code § 281(c)):
 - a. The Broadband Infrastructure Grant Account (IGA)
 - b. The Rural and Urban Regional Consortia Grant Account (Consortia Account)
 - c. The Broadband Public Housing Account (PHA)
 - d. The Broadband Adoption Account (Adoption Account)
 - e. The Federal Funding Account (FFA)
- 4) Requires the CPUC to develop, implement, and administer the CASF program to encourage deployment of high-quality advanced communications services to all Californians that will promote economic growth, job creation, and substantial social benefits of advanced information and communications technologies, as provided in specific decisions of the CPUC and in the CASF statute. (Public Utilities Code § 281(a))

- 5) Requires the CPUC to award grants from the Broadband Infrastructure Grant Account on a technology-neutral basis, taking into account the useful economic life of capital investments, and including both wireline and wireless technology. (Public Utilities Code § 281(f))
- 6) Requires that eligible projects for grant awards from the IGA shall deploy infrastructure capable of providing broadband access at speeds of a minimum of 100 mbps downstream and 20 mbps upstream, or the most current broadband definition standard set by the Federal Communications Commission. (Public Utilities Code §281(f))
- 7) Requires the CPUC to implement the FFA account to expeditiously connect unserved and underserved communities by applicable federal deadlines. (Public Utilities Code § 281 (n))
- 8) Provides that projects funded pursuant to the FFA shall be implemented consistent with applicable federal regulations and any condition or guidelines applicable to the one-time federal infrastructure moneys. (Public Utilities Code § 281 (n))
- 9) Requires the California Department of Technology (CDT), on or before May 1, 2024 to conduct, complete, and submit a report to specified legislative committees that reviews and identifies barriers to, and opportunities for, investment in, and efficient building of, broadband access points in specified locations. The report is required to identify barriers to, and opportunities for, access to mobile and fixed broadband internet service infrastructure by low-income tribal, urban, and rural customers, and underserved communities. (Government Code § 11546.9)

FISCAL EFFECT: Unknown. This bill is keyed fiscal by the Legislative Counsel.

COMMENTS:

- 1) *Author's statement*. According to the author, "AB 2369 addresses the critical issue of the digital divide by tasking the Little Hoover Commission with conducting a comprehensive study on the utilization of fixed wireless and other technologies. The goal is to explore innovative approaches that bridge the digital gap, ensuring 100% universal service for all Californians."
- 2) Defining and understanding the "digital divide". This bill would require a study on the use of fixed wireless and other technologies to bridge the digital divide. The term "digital divide" emerged in the 1990's in the United States to describe observed inequalities of access, initially, to computers and later to the Internet, information, and other digital technologies.¹ Broadly speaking, the digital divide is the gap between those who have access to technology, the internet and digital literacy training and those who do not. The digital divide would include the inequalities experienced by individuals, households, and communities that do not have access to a reliable broadband connection. The term could also include those individuals and groups that lack access to the resources, devices, skills, or training necessary to access technology and the internet. Due to the broad meaning of the term, it is up to interpretation where to place an individual, household, or community's relationship to the digital divide. In

¹ <u>https://www.oxfordbibliographies.com/display/document/obo-9780199756810/obo-9780199756810-0222.xml</u>

turn, because the term has such a broad and flexible meaning, the digital divide as a general concept is a potentially unclear starting place for a line inquiry seeking to understand how to bridge the divide. Instead, the starting point may benefit from further consideration of what facet of the digital divide is being discussed, such as infrastructure, affordability, digital skills, etc. However, this bill does not provide that level of specificity, and in turn may result in a report that does not have specific and actionable recommendations for the Legislature to act upon.

One potential starting point which presents a clear example of a population that are on the wrong side of the digital divide are those households that are unserved or underserved with a reliable broadband connection. According to recent testimony by the CPUC, there are nearly 1,000,000 households that are unserved or underserved with reliable broadband service. That number is even greater when accounting for households that do not subscribe to broadband service, or smaller when there is flexibility about the type of technology that qualifies as reliable (ie; fixed-wireless, mobile wireless, DSL, satellite, etc). For example, when the CPUC estimates the number of unserved and underserved households in California using federal guidelines, which consider the availability of wireless of the specific metrics used, this population of households is clearly disadvantage by a lack of access to a reliable broadband connection by any type of technology. As such, a narrow study that looks at the use of various technologies to provide service to these unserved and underserved households may provide useful insight about how bridge the digital divide moving forward.

3) *Understanding wireless and wireline technologies*. The report required by this bill would study the use of fixed wireless and other technologies to bridge the digital divide. Assuming that the report would seek to better understand the use of various technologies, and not just fixed wireless, there are several technology options that may be included in this report.

For example, there are various types of wireless technologies available on the market including satellite, fixed-wireless, and mobile wireless (or "cellular"). Modern satellite technologies rely on low-earth orbit (LOE) satellites that transmit data signals between a satellite low in Earth's orbit and antennae on earth's surface that is usually affixed to a specific location. Mobile or cellular wireless technologies allow users to use mobile devices, such as a cellphone or mobile hotspot, to access a connection within a fixed coverage area. For example, think of side-by-side "umbrellas" where a user can move between the coverage of the umbrellas. Fixed wireless technology, as opposed to mobile wireless, relies on pointto-point wireless connections between an access point or base station (such as a radio satellite) and the user at a fixed location. Unlike mobile wireless where the user can move around within the coverage area, fixed wireless sends a wireless signal between fixed locations. As such, fixed wireless connections have needed a clear line-of-sight between the user and the access point, which made this technology application impractical in some situations. Also, greater distances between users and the access point makes the signal susceptible to interference which can weaken the signal. However, fixed wireless technologies have advanced in recent years, with some manufactures demonstrating the ability to send fixed wireless signals where there is no line of sight between the fixed points.

As for wireline technologies that are capable of providing broadband speeds, those would include digital subscriber lines (DSL), coaxial cable, and fiber-optic cable. However, DSL lines are among the oldest and least well equipped to provide high-speed internet service.

Coaxial cable is more capable of delivering higher-speeds, especially with advancements in technology, and it is also among the most ubiquitous type of connection. For example, according to the California Broadband and Video Association, approximately 98 percent of California households have a coaxial cable connection. Lastly among the wireline technologies, fiber-optic cable (or just "fiber") is capable of delivering the highest speeds however less than half of California households have this type of technology available.

Considering the variety of technologies currently being utilized to bridge the divide above, under this bill the Little Hoover Commission could take the study in various directions that go beyond just fixed wireless. For example, a report that primarily focused on the use of mobile hotspots during the pandemic would appear to meet the requirements of this bill. On the other hand, the commission could also primarily focus on the use of fiber optic technology and still appear to meet the requirements of this bill. While such a report might be useful, it may not be completely aligned with the author's intent. Similarly to comments above regarding the broad meaning of digital divide, this bill may be improved by including more specificity around the particular types of technologies the author wishes for the commission to report on.

- 4) *Related/similar legislation*.
 - a. AB 1065 (Patterson, 2023) would have specified that wireless projects that meet the technological standards established by the California Public Utilities Commission (CPUC) for use of the California Advanced Services Fund (CASF) Federal Funding Account (FFA) would be eligible for funding. The bill was vetoed by the Governor.
 - b. SB 717 (Dodd. Chapter 813, Statutes of 2022) requires the Department of Technology (CDT), on or before May 1, 2024, to conduct, complete, and submit a report to specified legislative committees on barriers to and opportunities for the investment in and efficient building of broadband access points on private and government-owned structures and property.
 - c. AB 2749 (Quirk-Silva, 2022) would have, among other requirements, specified that wireless technologies are eligible for funding under the California Advanced Services Fund (CASF) Federal Funding Account (FFA). The bill was vetoed by the Governor.

REGISTERED SUPPORT / OPPOSITION:

Support

CTIA

Opposition

None on file.

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