
**SENATE COMMITTEE ON ENERGY, UTILITIES AND
COMMUNICATIONS**
Senator Ben Hueso, Chair
2021 - 2022 Regular

Bill No: AB 41 **Hearing Date:** 7/5/2021
Author: Wood
Version: 6/17/2021 Amended
Urgency: No **Fiscal:** Yes
Consultant: Sarah Smith

SUBJECT: Broadband infrastructure deployment

DIGEST: This bill requires the California Broadband Council (Council) to identify priority areas for broadband deployment and requires the California Department of Transportation (Caltrans) to install conduits for broadband infrastructure in state transportation rights of way within those priority areas. This bill also requires the CPUC to create and maintain a publicly accessible interactive map detailing broadband service available throughout the state and include specified data in the map.

ANALYSIS:

Existing law:

- 1) Gives the California Public Utilities Commission (CPUC) broad data collection authority while also restricting public access to information submitted to the CPUC by a public utility, subsidiaries or affiliates of a public utility, or a corporation, which holds a controlling interest in a public utility, except information specifically required to be open to public inspection. Existing law specifies that utility information submitted to the CPUC can be made public through an order of the CPUC through a proceeding or hearing. Any present or former officer or employee of the CPUC who divulges confidential information is guilty of a misdemeanor. (Public Utilities Code §§583-584)
- 2) Establishes the Council and specifies its membership and duties, including identifying opportunities for state agencies and state broadband networks to share facilities, rights-of-way, or other resources related to broadband deployment and adoption. (Government Code §8885 et. seq.)
- 3) Requires Caltrans to notify entities working on broadband deployment about transportation projects suitable for broadband conduit installation prior to construction and develop guidelines to facilitate the installation of broadband conduit on state highway rights-of-way. The guidelines must address access to

information on existing assets and collaboration on future projects.
(Government Code §14051)

- 4) Establishes net neutrality requirements and defines an internet service provider as a business that provides broadband service to an individual, corporation, government, or other customer in California. (Civil Code §3100 et. seq.)

This bill:

- 1) Defines an internet service provider (ISP) for the purposes of this bill as a business that provides broadband Internet access service to an individual, corporation, government, or other customer in California.
- 2) Expands the duties of the Council by requiring the council to do the following:
 - a) Develop a notification system to coordinate conduit deployment between the Caltrans, the CPUC, and ISPs.
 - b) Define and identify priority areas for broadband deployment within the state.
- 3) Specifies the information the Council must consider when identifying priority areas for broadband deployment, including, but not limited to, social and economic impacts, state contracts, the number of households already receiving broadband service, and anchor institutions.
- 4) Modifies Caltrans's responsibility for facilitating the deployment of broadband infrastructure in state transportation rights of way by requiring Caltrans to do the following:
 - a) Install broadband conduits for technology-neutral telecommunications cables in priority areas defined by the Council.
 - b) Work with companies or organizations working on broadband deployment to determine an equitable way to pay or reimburse the department for costs relating to broadband conduit planning, installation, and maintenance.
 - c) Develop guidelines and specifications for the deployment of broadband infrastructure using a microtrench.
- 5) Requires the CPUC to develop and maintain a public, interactive map that shows current and future planned broadband infrastructure and broadband infrastructure required to connect every Californian with high-speed Internet access. This bill requires the map to identify the following:
 - a) Established broadband deployed and operated by all state agencies.
 - b) A statewide relief map of current upload and download speeds.
 - c) Regional, county, and municipal deployment plans' future planned broadband infrastructure.

- d) Priority broadband deployment scenarios submitted by regional broadband consortiums.
 - e) Agricultural working lands.
 - f) Railways.
 - g) Forthcoming Caltrans highway construction projects that are targeted for broadband conduit installation.
- 6) Requires the CPUC to identify broadband service speeds for the following locations on the interactive map created pursuant to this bill:
- a) United States Postal Service offices.
 - b) Airports.
 - c) Ferry stations.
 - d) Amtrak stations.
 - e) Public schools.
 - f) Tribal lands.
 - g) Public libraries.
 - h) Colleges and universities.
 - i) Public fairgrounds, including, but not limited to, district agricultural associations, county fairs, citrus fairs, and the California State Fair.
 - j) Hospitals.
 - k) Grange halls.
 - l) ALERTWildfire cameras.
 - m) California welcome centers.
 - n) California roadside rest areas.
 - o) Crowdsourced data at a household level.
 - p) Electronic vehicle charging stations.
- 7) Requires the interactive map to include a function allowing a member of the public to submit a request to the CPUC for better internet service. This request function must require members of the public to identify minimum desired internet speeds, at desired monthly internet costs, and for the household's physical address. This bill requires the CPUC to update the interactive public map to include information from these public service requests.
- 8) Requires the interactive map to include a function allowing individuals to receive notifications when the CPUC updates the map.
- 9) Conforms the definition of broadband used by this bill to the definition adopted by the Federal Communications Commission (FCC).

Background

Relationship between conduits and broadband infrastructure. This bill establishes various policies to map broadband services and deploy broadband conduits for broadband installation. Conduits are the pipes and ducts into which broadband cables are installed. While conduits alone do not provide broadband services, the installation of conduits can facilitate broadband deployment by preparing rights of way for the installation of broadband cables. The construction of buried conduits during roadway construction is part of a policy called “Dig Once,” which is intended to facilitate broadband deployment by reducing the cost and time needed for duplicative excavations needed for fiber or cable installation. Installation of fiber or cable along freeways can help expand access to middle-mile broadband infrastructure, which is the portion of broadband networks that carries large volumes of data at high speeds to last-mile portions of the network. Last-mile facilities are the lines that provide service to a consumer’s home or business. Access to high-speed middle-mile infrastructure is generally necessary to obtain internet service at speeds that meet modern broadband needs.

Bill adds new duties to the Council. This bill requires the Council to identify priority areas for broadband deployment and to establish a notification system to coordinate conduit deployment between the Caltrans, the CPUC, and ISPs. Existing law establishes the Council as a 12-member body intended to facilitate inter-agency collaboration to facilitate broadband deployment in the state. The Council’s membership includes representatives from multiple state agencies; however, the Council is primarily supported by staff from the California Department of Technology. Under existing law, the Department of Technology may lack sufficient authority and resources to obtain information from telecommunications providers needed to identify areas where broadband infrastructure should be deployed. To the extent that the Department of Technology lacks these resources, the Council may rely on the staff and resources of other council members, including the CPUC, to provide data to the Council. To the extent that duties assigned to the Council are ultimately delegated to the CPUC or other agencies with representatives on the Council, those agencies may require additional resources to complete the work resulting from this bill.

Bill expands Caltrans’s Dig Once duties to require construction of conduits. Existing law requires Caltrans to notify entities that deploy broadband about opportunities to install broadband in transportation rights of way before beginning construction on a project. Existing law also requires Caltrans to adopt guidelines to facilitate the deployment of broadband infrastructure along state highways. This bill expands Caltrans’s broadband deployment duties by requiring Caltrans to construct conduits along state highways in the areas that the Council prioritizes.

This bill also requires Caltrans to develop a mechanism to receive reimbursement from companies and organizations that deploy broadband for Caltrans's work to install conduits.

The Governor's proposed 2021-22 State Budget includes a proposal to use federal stimulus funds and state monies to build a fiber optic middle-mile in Caltrans rights of way. Under the Governor's proposal, this construction would include the installation of broadband infrastructure in addition to any necessary conduits. In contrast, this bill requires Caltrans to install conduits that may or may not be used by broadband providers to deploy broadband infrastructure at a later date. Additionally, this bill also modifies the existing goal of installing fiber in through California's Dig Once policy to instead encourage the deployment of conduits for "technology neutral" infrastructure; however, it is unclear how Caltrans would deploy conduits on a fully technology neutral basis because conduits for broadband are generally only used to house certain types of technologies. This bill also differs from proposals using grant funding or stimulus dollars for construction by requiring Caltrans to develop a process for obtaining reimbursement from broadband providers after Caltrans has constructed the conduits. However, it is unclear how Caltrans can obtain reimbursement for a specific conduit construction if a specific provider does not intend to use the conduit for deployment.

Bill's broadband mapping requirements may not align with data needs. This bill requires the CPUC to establish an interactive broadband map and specifies a variety of data layers that this map must include. The CPUC already maintains an interactive broadband map, known as CalSpeed. CalSpeed already includes some of the data required under this bill. For example, a variety of anchor institutions, including libraries, schools, healthcare facilities, and public safety facilities are already mapped in CalSpeed. CalSpeed also already includes crowdsourced information and a tool for the public to provide feedback. This bill would significantly expand the layers of data that the CPUC would be required to incorporate into CalSpeed, and this bill would require the CPUC to incorporate a notification system into the map that would enable Californians to tell the CPUC what level of broadband service they want and what price they want to pay for that service. This bill also requires the CPUC to include information from those requests in the interactive map. Including this volume of additional data would likely limit the map's usefulness for identifying those areas that disproportionately suffer from poor broadband access and will not necessarily lead to improved broadband services.

Need for Amendments. As currently drafted, this uses a definition of a broadband provider that includes companies that do not own or operate infrastructure. This bill assigns duties to the Council for which the council may lack sufficient

authority and resources. This bill also requires Caltrans to establish a reimbursement process for construction work that may not have a clear nexus to a broadband provider's deployment plans, and this bill requires data collection and mapping that may not support broadband deployment efforts. *For these reasons, the author and committee may wish to amend this bill to do the following:*

- *Redefine broadband providers under this bill as facilities-based providers.*
- *Recast the data collection and broadband mapping and prioritization duties assigned to the California Broadband Council and the CPUC to instead require the CPUC to do the following:*
 - *Identify Caltrans rights of way where middle-mile infrastructure should be prioritized.*
 - *Collect granular broadband data and update existing broadband maps to identify the percentage of a census block that receive broadband service that meets federal and state broadband standards.*
- *Clarify that Caltrans can obtain reimbursement for conduits under this bill to the extent that a broadband provider has requested the conduit's construction.*

Prior/Related Legislation

AB 488 (Aguiar-Curry, Chapter 426, Statutes of 2019) expanded the membership of the Council by adding the Secretary of Food and Agriculture, the State Librarian, and the Governor's Tribal Advisor to the Council.

AB 980 (Wood, 2017) would have defined priority areas for broadband deployment and required Caltrans to install broadband conduits for fiber broadband installation in those priority areas. The bill died in the Assembly.

AB 1549 (Wood, Chapter 505, Statutes of 2016) required Caltrans to take certain steps to notify broadband deployment entities about opportunities to install broadband conduit in state transportation rights-of-way. The bill also required Caltrans to adopt guidelines for installation of broadband conduits in these rights of way.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: No

SUPPORT:

California Forward Action Fund
 California Telehealth Network
 First 5 California
 Marin County Board of Supervisors

OCHIN

South Bay Cities Council of Governments

The Rural Caucus of the California Democratic Party

The Utility Reform Network, if amended

OPPOSITION:

CTIA, unless amended

ARGUMENTS IN SUPPORT: According to the author:

Californians are no longer asking “if” they will be connected, but “how”. The state has a chance to make common sense and forward thinking investments that will pay dividends for our future.

Our highways already connect our state and provide a roadmap for fiber deployment. Every time there are open trenches during routine highway improvements, we need to consider the opportunity for dig-once. Some of these road improvement projects happen once in a lifetime and we cannot afford to continue building roads that aren’t ready for the future. Dig-once opportunities allow any company to add fiber cables through existing conduit — cutting the cost of broadband deployment by up to 90 percent, according to the Federal Highway Administration. Despite assurance by Caltrans to develop an internal policy to employ dig once, there have failed to do so and as a result we continue to miss opportunities to get more Californians online.

Finally, we need to improve mapping resources for local governments. Maps that broadly define Census blocks as “served” and “unserved” oversimplify and misrepresent the challenges. Let us better understand what our current needs are before we break ground.

These straightforward steps chip away at the chasm that is the digital divide. The state is making unprecedented investments in broadband infrastructure and we need to ensure that those improvements reach those that have remained perennially offline.

ARGUMENTS IN OPPOSITION: Opponents express concerns that this bill is duplicative of existing broadband mapping efforts and this bill’s data collection and reporting requirements do not address data needs for effective broadband deployment. CTIA opposes this bill unless it is amended to better align data

collection and reporting to federal standards and eliminate unnecessary data reporting. CTIA states:

CTIA recommends the CPUC collect data on the availability of broadband internet access service in California efficiently, without imposing duplicative reporting requirements, and in a format consistent with federal broadband data collection requirements. While we agree improved maps are needed to reach those last remaining unserved households, the FCC is in the process of finalizing rules to deploy accurate location-based and nationally consistent mapping, potentially as early as the end of this year. The CPUC should collect granular data on locations served in a manner consistent with federal broadband data collection and mapping processes. This data should be available to policymakers and the public to ensure public funds for broadband deployment are targeted for projects in areas that are unserved.

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