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MEMORANDUM

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TO: Interested Persons

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SUBJECT: Broadband Internet Service Programs in Colorado

Summary

This memorandum provides an overview of broadband internet service programs in Colorado, including the Colorado High Cost Support Mechanism; state grant programs and other state efforts; local governments' ability to provide broadband; and related recent legislation.

Overview

Large swaths of Colorado do not have access to reliable high-speed broadband due to issues related to geography, population, and costs. According to the Governor's Office of Information Technology (OIT), in Colorado's rural areas, only seven in ten people have access to broadband. The Governor wants to raise rural broadband availability from 70 percent to 85 percent by the end of 2018, and pave the path to achieve 100 percent access for all of Colorado by 2020. Programs aimed at addressing the gap in broadband access between urban and rural areas are discussed in the sections below.

Definitions. Colorado law defines broadband internet service as a retail service that transmits and receives data from the customer's property or determined point of presence to substantially all internet endpoints. The definition of broadband internet service also includes any capabilities that are incidental to and enable the operation of broadband service. In practice, broadband is access to the internet and the speed with which one connects.

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¹Section 40-15-102 (3.5), C.R.S.

Broadband regulation in Colorado. While, the free market largely regulates broadband service in Colorado, but the Public Utilities Commission (PUC) within the Department of Regulatory Agencies (DORA) has specific responsibilities. In 2005, Senate Bill 05-152 created a statewide framework for broadband regulation and prevented local government entities from providing high-speed internet access to service subscribers, with certain exemptions, as discussed in the Local Government section below.

Several Colorado agencies play roles in broadband service in Colorado. The PUC regulates telecommunications in Colorado and administers the Colorado High Cost Support Mechanism (CHCSM). The PUC transfers CHCSM funds to the Broadband Deployment Board, which DORA administers, for deployment of broadband service in unserved areas of the state. In addition, OIT houses the Colorado Broadband Data and Development Program, a statewide broadband mapping and planning initiative led by OIT. The Colorado Department of Transportation (CDOT) also administers a fiber optic telecommunications transmission line over areas of the state.

Colorado High Cost Support Mechanism (CHCSM)

History. The CHCSM was created by Senate Bill 98-117 and replaced the Colorado High Cost Fund as the mechanism to achieve basic universal telecommunications service. The High Cost Fund was initially created by House Bill 95-1355. The CHCSM is administered by the PUC, but is held outside the state by Solix, a private management and consulting firm.

Collections. The CHCSM is a surcharge that applies to all providers of intrastate telecommunications service. Contributions to the CHCSM are determined by the PUC based on providers' retail revenues, which are reported twice a year. The current Colorado Universal Service Charge is 2.6 percent, which was set in 2013. In 2016, an average of 111 telecommications providers contributed to the fund. Contributions are projected to be approximately \$38.4 million in 2016, a decline of approximately \$5.0 million from 2015. According to DORA, contributions to the CHCSM are declining due to consumers cancelling traditional wireline service and the proliferation of consumer data packages that bundle data and voice together.

Distributions. Funds collected through the CHCSM are distributed to eligible telecommunications carriers in both rural and non-rural areas that are considered high-cost geographic areas in which to provide telecommunications services. Eligible carriers may include incumbent local exchange carriers, wireless carriers, competitive local exchange carriers, and Voice over Internet Protocol (VoIP) providers. Distributions to eligible providers occur quarterly. In 2016, 14 eligible providers received support: 1 non-rural carrier, 10 rural carriers, and 3 wireless carriers. Table 1 shows contribution and distribution amounts from 2013 to 2017.

Table 1
CHCSM Contribution and Distribution Amounts, 2013 to 2017

	2013	2014	2015	2016**	2017**
Contributions	\$52.9 million	\$46.7 million	\$43.3 million	\$38.4 million	\$36.2 million
Distributions*	\$52.5 million	\$53.2 million	\$37.2 million	\$33.9 million	\$33.9 million

Source: 2016 Annual Report on the Colorado High Cost Support Mechanism.

Broadband Deployment Board Grants

Overview. The 16-member Broadband Deployment Board (board), created by House Bill 14-1328, provides direction and oversight to ensure the goal of "universal access" by awarding grants for broadband development in underserved areas of Colorado. Grants may only be awarded in areas where there is no competition for basic broadband services, as determined by the PUC. Grants cover up to 75 percent of project infrastructure costs and applicants must demonstrate that their projects represent new broadband deployment, include "last mile" service and matching funds, and meet additional requirements. Grants may only be awarded to for-profit entities; except that a nonprofit telephone cooperative or a nonprofit rural electric association that existed on May 10, 2014, is also eligible.

Right of First Refusal. The right of first refusal process allows an entity that is already operating in an area where a grant was awarded to challenge the grant. If the challenging entity can offer the same level of services as the entity that was awarded the grant, it can assume the grant and build the service.

Funding. Board expenses are paid out of the Broadband Administrative Fund, while funding for the grants is paid out of an account within the CHCSM and administered by Solix, a private management and consulting firm. The PUC is authorized to transfer CHCSM funds no longer required to support universal basic services to the grant program account. In FY 2015-16, the PUC transferred \$2.7 million for broadband grants. In FY 2017-18, \$9.45 million was transferred for grants, as required by Senate Bill 17-306. Currently, there is no additional funding marked for rural broadband, and no additional grant cycles are planned.

Projects. In FY 2016-17, the board awarded eight grants to seven recipients, totaling \$2.1 million. Grants ranged from \$43,334 to \$841,200. A list of grant recipients and specific projects can be found at https://www.colorado.gov/pacific/dora-broadband-fund/2016-grant-awards. In the current FY 2017-18, \$9.45 million is available for grants. Applications for the grant were due in September 2017, and there were \$19.2 million in requests received.

Broadband Grant Program

The Department of Local Affairs (DOLA) provides broadband grants in two areas, planning assistance and middle-mile infrastructure grants. Regional plans must be completed prior to receiving an infrastructure grant. The grants are funded through \$20.0 million that was set aside for broadband grants from DOLA's Energy/Mineral Impact Assistance Fund (EIAF) grant.

^{*}Distribution amounts do not include administrative expenses.

^{**2016} and 2017 are estimates.

EIAF funds originate from the state severance tax on energy and mineral production and from a portion of the state's share of royalties paid to the federal government for mining and drilling of minerals and mineral fuels on federally owned land. The grants have been awarded since 2012 and require local governments to provide matching funds. As demonstrated in Table 2, a total of 39 grants have been awarded as of September 2017, totaling approximately \$35.0 million in state and local funds.

Table 2
EIAF Grants Awarded, as of September 2017

	Grants Awarded	State EIAF Funds Awarded	Local Government Match
Planning Grants	24	\$2,870,496	\$2,114,426
Infrastructure Grants	15	\$14,593,269	\$15,359,444
Total	39	\$17,463,765	\$17,463,765

Source: Department of Local Affairs.

Additional Programs

Tax refund. Broadband providers may claim a refund of state sales and use taxes paid for tangible personal property installed for the provision of broadband service in a target area. The total amount refunded may not exceed \$1.0 million per year. No data are currently available from the Department of Revenue on the amount that was refunded in 2016, the first year the refund was available.

Broadband coordination and mapping. The Colorado Broadband Data and Development Program in OIT is a statewide broadband mapping, planning, and education initiative. It is funded through a \$5.3 million federal grant from the National Telecommunications and Information Administration. For a map of broadband speeds in Colorado, see http://maps.co.gov/HTML5Viewer_2_5/?viewer=Map.

Colorado Department of Transportation. CDOT administers a fiber optic telecommunications "backbone" along several highways in Colorado. CDOT uses this transmission line to operate its Intelligent Transportation Systems (ITS) infrastructure to gather data, which the department uses to manage traffic and traffic incidents while providing real-time information to the traveling public. Partners, such as higher education, K-12 education, emergency services, local transportation agencies, and tertiary partners, for a variety of public services, also use the transmission line. For example, CDOT has provided high-speed connectivity to 18 school districts and has a fiber optic lease agreement with Comcast for dark fiber usage along I-70 between Golden and Vail.²

Local Governments

Under state law, local governments may not provide, purchase, lease, or operate telecommunications services or equipment, including high-speed internet or cable television

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²Dark fiber is unused, installed fiber optic cable.

services, for subscribers. Local governments are exempt from the prohibition if voters authorize the local government to offer broadband services, or if:

- no private provider of telecommunications service provides service within the local government boundary;
- the local government requests that an incumbent provider offer telecommunications services; and
- the incumbent provider declines to offer the service or does not commence service within 14 months of the request.

To date, 136 constituencies have authorized their local government to provide telecommunications services, although not all of these authorized local governments actually offer those services.

Federal Funding

The National Telecommunications and Information Administration (NTIA) in the federal Department of Commerce works to expand broadband internet access and administers grant programs that further the deployment and use of broadband. In addition to the NTIA, various other agencies in the federal government offer funding for broadband infrastructure and planning, including the Department of Agriculture, the Federal Communications Commission, the Department of Housing and Urban Development, and the Department of Labor. More information on funding sources can be found at:

https://www.colorado.gov/pacific/dora/federal-broadband-resources.

Recent Legislation

In addition to the legislation discussed above, the General Assembly has passed several other bills related to broadband in Colorado.

Senate Bill 17-306. This bill requires that the PUC determine how much funding is available for broadband deployment grants and administration, based on a determination of how much is no longer required to support universal basic telephone services due to the existence of "effective competition for basic service." It also changes the funds utilized by the Broadband Deployment Board for grant awards and program administration.

House Bill 17-1174. This bill permits a rural county with a population of fewer than 60,000 residents to establish a local improvement district in an unserved area in order to contract with a telecommunications service provider or an advanced service provider to fund the construction of an advanced service improvement.

House Bill 17-1193. This bill made changes to the permitting process and use of right of way for telecommunications companies installing small cell facilities.

House Bill 16-1184. This bill required that CHCSM funds allocated to the Broadband Fund be transferred between July 1 and August 31 of each year, and specified that all money in the fund be continuously appropriated to the Broadband Deployment Board and any other money in the fund is subject to annual appropriation by the General Assembly.

House Bill 14-1328. This bill created the Broadband Deployment Board and grant program for broadband development in unserved areas of the state. Members of the board are appointed by the Governor and legislative leadership, and include representatives from the PUC, the Office of Economic Development and International Trade, DOLA, OIT, local governments, the broadband industry, and members of the public from different geographic areas, including two unserved areas. Funding is provided through transfers from the CHCSM by the PUC.

House Bill 14-1327. This bill set statewide policy concerning the deployment of broadband technology, including creating a rebate of state sales and use taxes paid on broadband equipment installed in target areas of the state, and clarifying permitting and installation of broadband facilities and certain wireless service facilities.