Digital Divide Taskforce

Meeting Summary

March 9, 2021 | 10:00 AM – 11:30 AM

Zoom Recording: https://youtu.be/p2b56kGIg0c

Members in Attendance: David Graham (City of Carlsbad); Gretchen Newsom (IBEW 569); Joe Britton, Omar Zevallos (SDGE); Elizabeth A. Dooher, Yadira Whitney, Christ Schmidt, Roy Flores (CALTRANS); Dennis Gakunga, Bill Valle (City of Chula Vista); Carla Leal (Cox Communications); Erin Hogeboom (San Diego for Every Child); Maci Morin, Jessica Routzahn (NARC); Sal Espinoza, Bianca Garcia (CWA); J Stanley, Robb Baer (Cisco); Brian Pollard (UC Project); Nishal Mohan (Mohuman); Shahriar Afshar (Verizon); Debbie Shireman (CETF); Michelle Jaramillo (SD Foundation); Mark Baza (Imperial County Transportation Commission); Jeff Hebert (SD Sheriff); Patricia Chavez (PIQE); Sarah Moga Alemany, Ady Huertas (City of San Diego); Katelyn McCauley (San Diego Business); Ramesh Rao (UCSD); Erin Phillips (National Core); Danny Pasawongse (Chula Vista ESD); Paul Morris (San Diego Housing Commission); Nerea Urtasun (County of San Diego); Jeremy Ogul (Madaffer); David Reed (U of Colorado); Matthew Rantanen (Southern California Tribal Chairman's Association); Felipe Monroig (Charter); Antoinette Meier, Sanjiv Nanda, Jack Christensen, Laurie Grover, Lindsey Hansen, Amy DeNinno, Tim Hornyak, James Jimenez (SANDAG)

1. Introduction of New Taskforce Members

Antoinette Meier, Director of Mobility and Innovation at SANDAG, introduced the newest members of the taskforce. SDG&E, Southern California Tribal Chairman's Association, Parent Institute for Quality Education, Southwestern College, San Diego Housing Commission, O'Shuns Orchard/Montezuma Valley Market, Imperial Valley EDC and Imperial County Transportation Commission (Southern Border Broadband Consortium).

2. Legislative Updates

Laurie Grover and Jack Christensen, Associate Government Relations Analysts at SANDAG, shared legislative updates. Congress is in the midst of passing landmark relief legislation. The $1.9 trillion bill HR 1319 includes a $7.6 billion Emergency Connectivity Fund at the Federal Communications Commission to provide funding for eligible schools and libraries to offer connected devices, internet service, hotspots, etc. To students and teachers to connect to the internet at home. There is a group of Senators calling for a quadrupling of base high-speed broadband delivery speeds, making 100 megabits per second download and upload speed the new base for high speed broadband.

The California Advance Services Fund (CASF) is a program administered by the California Public Utilities Commission (CPUC) and seeks to fund broadband deployment. Statewide consortia manage grants from the CASF. San Diego County is covered under the Southern Border Broadband Consortium, which also includes Imperial County, and has an active grant. SANDAG staff has been in touch to identify opportunities to collaborate. However, under current program rules, SANDAG is not allowed to form their own consortium nor apply for funding if a consortium has an active grant. The CPUC has an open rulemaking to consider rule changes to the CASF. SANDAG is working to submit a motion to become a party to the proceeding so that we may submit comments and welcome other interested parties to work alongside SANDAG if of interest.

3. Presentation and Group Discussion on Data Collection and Research Findings

Broadband Service Plans: Advertised Costs and Speeds

James Jimenez, Mobility and Innovation Intern at SANDAG, updated the taskforce on the broadband service plans advertised within the county including both wireline and wireless plans. There are 20 internet service providers in the region. Each provider has a distinct service area and no single provider covers the entire region. 18 providers offer plans with advertised speeds that achieve the federal standard of 25 Mbps for broadband internet connections. 13 providers offer plans with advertised speeds that meet the state target of 100 Mbps. Fiber internet plans cost between $60 to $109.99. Cable internet plans are between $45 and $69.99. Cable and satellite are between $14.99 and up to $350. Subsidized internet plans offer lower-cost internet connections for community members who meet eligibility requirements. Three providers offer subsidies in our County at download speeds of 30 Mbps or less. Eligibility requirements vary by provider, typically households that are enrolled in public assistance programs can apply. Subsidized service is only available to households that qualify within the services areas of AT&T, Charter Spectrum and Cox.

Speed Data

Sanjiv Nanda, Entrepreneur-in-Residence at SANDAG, reviewed broadband service tiers. The pandemic has revealed that the minimum service tier of (25/3 Mbps) is inadequate for telework and distance learning.

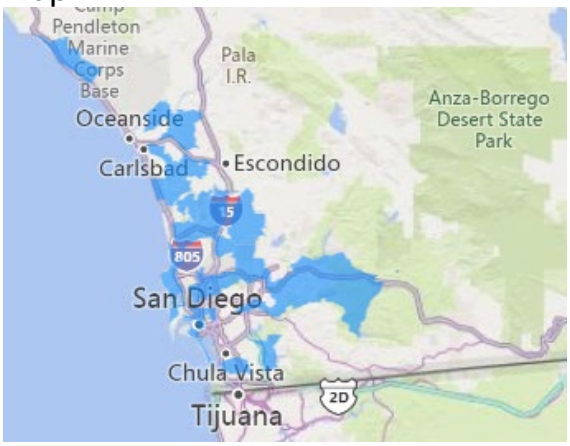
M-Lab is an open source project and hosts the largest open Internet performance dataset in the world. For more details on M-Lab speed test and its accuracy, please refer to the blog: https://www.measurementlab.net/blog/speed-tests-accuracy/. In particular, NDT (the M-Lab speed test) essentially measures how fast a file can be

downloaded along a full Internet path via a single download stream, and, as such, its measurements precisely and accurately mirrors the user experience of accessing files on the Internet. In actual usage the speed experienced is a function of application, the round trip delays to the location of the server(s), and many other factors. Different speeds tests can therefore report different results.

SANDAG is also in discussions with Ookla to obtain speed test results that use a somewhat different methodology.

Sanjiv Nanda also shared regional speed test data acquired from M-Lab. Speed Test Data collected between January and October of 2020 showed the regional average as 41 Mbps download speed and 11 Mbps upload speed. There are significant variations across the region; 25% of ZIP codes have average download speed tests below 25 Mbps, and 20% of ZIP codes have average upload speed tests below 5 Mbps. These maps were shared in the presentation. Although the majority of these ZIP codes are located in the unincorporated East County and Tribal Nations, there are notable exceptions as seen on the map.

Several taskforce members requested information on the percent of ZIP codes that have average download speeds at 100 Mbps or higher. In the data set, only one ZIP Code 91914 (Chula Vista NE) reported an average downlink speed above 100 Mbps. 33% of the ZIP Codes exceed average download speeds of 50 Mbps, as seen on this map.



Broadband Provider Interview Findings

Antoinette Meier shared key findings from interviews with broadband providers. Current challenges described by providers include lack of organized and accessible information on permitting, inconsistent permitting practices and policies across jurisdictions, uncertain timelines and cost for acquiring a permit, and restrictive policies and prohibitive conditions that don't comply with federal guidelines. She

also explained that a standard for microtrenching is needed if it is to be adopted more widely, and Dig Once/Dig Smart policies were seen as good in theory but ineffective in practice. Best Practices that providers identified include modernizing and streamlining permitting, standardizing cost and time structures, allowing for batching or master permitting, cross jurisdictional consistency and coordination, development of design guidelines and standards for wireless, and establishing a GIS based inventory of infrastructure and assets that can be leveraged by providers. For a more detailed overview, see the Service provider interview summary.

Local Jurisdiction Interview Findings

Amy DeNinno, Digital Divide Research Fellow with SANDAG, shared key findings from interviews with local jurisdictions. 21 agencies were contacted, and 16 responded.

Permitting key findings: required permits for wireless and fiber include encroachment permits or right-of-way permits, conditional use permits in some instances, Master License Agreements in some jurisdictions; certain projects require additional permits and fees for traffic control, engineering review, public works inspections, etc.; 12 of 16 jurisdictions stated that they met FCC Shot Clock mandates for 60/90/150-day wireless approval time, which does not include additional time for corrections; 2 jurisdictions have documented policies and guidelines to expedite the permitting process; permit fees highly variable ($350-$5,800) and additional costs may be required for traffic control, inspections, etc.; cost recovery is important for jurisdictions; 6 jurisdictions allow batch permitting for wireless; 3 jurisdictions allow master permit agreements.

Public-Private Partnerships (P3) key findings: Cities see the potential of P3s. There is an opportunity to learn from and duplicate successes. 4 cities have active partnerships; 11 cities have identified ROW for private use and 2 cities map that information; 1 city is developing a Dig Once policy, 11 encourage the practice but have no official policy; no agencies are currently sharing fiber but 1 is developing an agreement. Another common issue identified by city staff include: private companies lack interest in serving low-income and low-density areas and agencies lack staff and funding to address market failures.

Other takeaways: Interviews have revealed some best practices. Chula Vista has collected data, identified gaps, and developed comprehensive plans. City of San Diego is doing a gap analysis for the Promise Zone. Digital Equity and Broadband Planning has not been a priority for most jurisdictions due to staffing and funding constraints. Also outreach and education is lacking and SANDAG can assist with a regional strategy. This Taskforce can create conditions for collecting and sharing data on broadband gaps, coordinated planning and policy development, and outreach and education.

Tim Hornyak, Mobility and Innovation Intern, explained that staff is collecting information from public agencies on their fiber investments so a regional fiber map can be developed. Most of the local jurisdictions do not have their fiber assets mapped, although several are working on it now, so it will take more time to build a map and identify where gaps exist in publicly deployed fiber.

Regional Fiber Ring

Chip Finch, Principal Systems Engineer at SANDAG, explained that there is very little data on where the private sector has deployed fiber in the region. This information is considered confidential by the providers and is not shared. However it can be inferred that there is extensive fiber in the urbanized areas of the region (western 1/3) but very little fiber in the less populated areas in the eastern portion of the County. There have been a few fiber public/public and public/private infrastructure sharing agreements in the region that the transportation agencies have used to link up transportation systems and create redundancy. There may be an opportunity to leverage this fiber ring and connect more cities in the future, but establishing these shared use agreements is very complicated and we need to analyze it further.

Antoinette Meier shared an example of a regional fiber ring that is shared among multiple agencies led by the Southbay Cities Council of Government.

4. **Presentation of Vision, Framework, and Guiding Principles for the Digital Equity Strategy**

Antoinette Meier reviewed updates to the framework and guiding principles based on member feedback. The framework was consolidated into two categories, Access and Adoption, that cover multiple areas including affordability, privacy, and security. The Digital Equity Strategy Guiding Principles were outlined to include: data driven; reduce barriers; capacity building; needs based; performance; choice; resiliency; alignment; collective action; continuity; expediency; accountability; transparency; educate.

Antoinette also presented the vision statement for the Digital Equity Strategy which was based on input provided by taskforce members: *We envision a San Diego region where everyone has access to high-quality broadband connectivity and the tools and skills needed to use technology to improve their lives.*

A complete overview of the Vision, Framework and Guiding Principles was shared in the Chat: Digital Equity Strategy and Guiding Principles.

5. Digital Equity Communications Materials Under Development

Lindsey Hansen, Public Communications Officer at SANDAG, shared efforts to create a one-stop-shop for maps and data, a regional resource list, and educational pieces. In order to support this effort, she requested to form an ad-hoc work group to discuss further ideas and provide input on content. Taskforce members were asked to alert her if they were interested in joining this work group.

6. Member Updates

There were no member updates.

7. Next Steps and Upcoming Meetings

A broadband Workshop with various city staff from SANDAG working groups will be held on April 22. The next Regional Digital Divide Taskforce meeting is planned for May 13. A presentation of the broadband gap analysis to the SANDAG Board of Directors is planned for May or June. Several adhoc work groups will be formed to work on specific areas of focus for the Digital Equity Strategy: Public Agency Planning, Permitting and Deployment; Economic Impact Analysis; Outreach and education.