THE POLICY CIRCLE DIGITAL LANDSCAPE





> WHAT IS A DIGITAL LANDSCAPE? <



DIGITAL LANDSCAPE-CONSIDERS THE SPACES AND NETWORKS CREATED BY TECHNOLOGICAL DEVELOPMENTS, THE COLLECTIVE OF WEBSITES, EMAIL, SOCIAL NETWORKS, MOBILE DEVICES (TABLETS, IPHONES, SMARTPHONES), VIDEOS (YOUTUBE), ETC.

DIGITAL INFRASTRUCTURE

REFERS TO THE INFRASTRUCTURE THAT IS NEEDED TO MAINTAIN AND OPERATE A NATIONAL AND INTERNATIONAL COMPUTER NETWORK, PROCESS E-COMMERCE TRANSACTIONS, AND CREATE, DISTRIBUTE, AND ACCESS DIGITAL MEDIA CONTENT ONLINE.





FACTS TO KNOW





IN 2016, OUR WORLD IN DATA ESTIMATED THAT ALMOST 3.5 BILLION PEOPLE HAD ACCESS TO THE INTERNET. IN JANUARY 2021, DATAREPORTAL ESTIMATED CLOSE TO 4.66 BILLION PEOPLE, CLOSE TO 60% OF THE WORLD'S POPULATION, WERE USING THE INTERNET. THE DISTRIBUTION IS NOT EQUAL; 2.4 BILLION PEOPLE LIVE IN COUNTRIES WHERE A 1-GB MOBILE BROADBAND PLAN IS UNAFFORDABLE FOR SOMEONE EARNING AN AVERAGE INCOME.

THE FCC'S BROADBAND DEPLOYMENT REPORT ESTIMATES 21.3 MILLION AMERICANS, OR 6.5% OF THE POPULATION, LACK ACCESS TO BROADBAND, BUT OTHERS SAY THESE FIGURES MAY COME FROM FLAWED REPORTING AND THE NUMBER COULD ACTUALLY BE AS HIGH AS 42 MILLION AMERICANS.

IN 2018, THE FCC ESTIMATED 25% OF RURAL AMERICANS AND 33% OF AMERICANS LIVING ON TRIBAL LANDS LACKED BROADBAND ACCESS. IN CITIES, MANY PEOPLE CAN'T AFFORD BROADBAND, EVEN IF THEY HAVE ACCESS TO IT IN THE CITY. REGARDLESS OF LOCATION, ROUGHLY 40% OF AMERICANS WHO MAKE LESS THAN \$30,000 A YEAR LACK HOME BROADBAND CONNECTIONS OR A COMPUTER.

SOME STATES LIKE CALIFORNIA HAVE A
FEW NATIONAL OR REGIONAL PROVIDERS;
OTHERS LIKE MINNESOTA HAVE SMALL BUT
CRITICAL LOCAL COMPANIES AND
PROVIDERS; AND PLACES LIKE TENNESSEE
HAVE RURAL ELECTRIC COOPERATIVES
THAT ARE EXPANDING INTO BROADBAND TO
MEET COMMUNITY NEEDS



COVERNMENT INVOLVEMENT



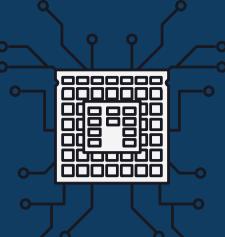
U.S. GOVERNMENT ACTIVITY IN THE DIGITAL LANDSCAPE FOCUSES ON CYBERSECURITY, DATA PROTECTION, NET NEUTRALITY, AND ACCESS TO BROADBAND. THERE IS ALSO DEBATE AROUND REMOVING REGULATORY BARRIERS TO ENABLE DEPLOYMENT OF EXISTING TECHNOLOGIES AND CLEAR THE WAY FOR NEWER TECHNOLOGIES.

COMPETITION AND ANTITRUST ENFORCEMENT, PARTICULARLY WHEN IT COMES TO LARGE TECHNOLOGY COMPANIES, IS ANOTHER IMPORTANT AREA OF GOVERNMENT INVOLVEMENT, DUE TO SECTION 230.

GOVERNMENTS CAN INFLUENCE THE DIGITAL LANDSCAPE BY GENERATING POLICIES THAT REMOVE REGULATORY BARRIERS TO SUPPORT COMPETITION, DEVELOPING STRATEGIES FOR RESOURCE MANAGEMENT TO FINANCE ACCESS AND INNOVATION ENACTING REFORMS TO PROMOTE AN OPEN INTERNET WHILE ALSO PROTECTING PRIVACY

BETWEEN 2015 AND 2020, THE
FEDERAL GOVERNMENT PROVIDED \$22
BILLION TO SUPPORT THE EXPANSION
OF RURAL BROADBAND, BUT THE
ESTIMATED COST TO DELIVER
BROADBAND TO ALL AMERICANS
CURRENTLY LACKING IT AMOUNTS TO
ROUGHLY \$80 BILLION.





FRAMING THE ISSUE



HAVING DISCONNECTED SECTORS OF THE POPULATION "UNDERMINES POLICY OBJECTIVES IN AREAS SUCH AS HEALTH AND EDUCATION, AS WELL AS BROADER ECONOMIC AND SOCIAL DEVELOPMENT" SINCE PRIVATE AND PUBLIC SERVICES REQUIRE RELIABLE BROADBAND. IF GOVERNMENT OFFICIALS DO NOT HAVE "A CLEAR PICTURE OF WHERE SERVICE GAPS EXIST...PARTS OF THE COUNTRY WILL BE LEFT OUT WHEN IT IS TIME TO DISTRIBUTE FUNDS."

BROOKINGS INSTITUTION REPORT FOUND THAT "DIGITAL SKILLS HAVE NOW BECOME A PREREQUISITE FOR BASIC ECONOMIC INCLUSION." DIFFERENCES BETWEEN STUDENTS WITH LIMITED OR NO HOME INTERNET ACCESS AND THOSE WHO DO HAVE ACCESS IS "EQUIVALENT TO THE GAP IN DIGITAL SKILLS BETWEEN EIGHTH- AND ELEVENTH-GRADERS." AMONG ADULTS, MANY JOB APPLICATIONS ARE EXCLUSIVELY AVAILABLE ONLINE.

THERE ARE 22 STATES THAT HAVE

"SUBSTANTIVE ROADBLOCKS TO

ESTABLISHING MUNICIPAL NETWORKS TO

RESIDENTS," WITH THE GOAL OF PREVENTING
GOVERNMENT FROM CROWDING OUT THE
PRIVATE SECTOR. OTHER REPORTS HAVE
FOUND STATES WITHOUT SUCH RESTRICTIONS
ENJOY HIGHER ACCESS TO LOW-PRICED
BROADBAND PLANS ON AVERAGE,
PARTICULARLY IN RURAL COMMUNITIES WITH
FEW SERVICE PROVIDERS TO CHOOSE FROM.



AS THE RACE TO BUILD A 5G NETWORK CONTINUES, IT HAS BECOME CLEAR THAT WHICHEVER COUNTRY DOMINATES THE SYSTEM WILL CONTROL ITS INFORMATION FLOW AND "WILL GAIN AN ECONOMIC, INTELLIGENCE, AND MILITARY EDGE." THIS UNDERSTANDING HAS RAISED CONCERNS ABOUT CYBERATTACKS, WHICH HAVE DOUBLED SINCE 2015. THIS COMES AFTER THE SEPTEMBER 2018 RELEASE OF THE US NATIONAL CYBER STRATEGY. THE REPORT, WHICH ALSO MENTIONS THREATS FROM RUSSIA, CHINA, AND NORTH KOREA, OUTLINES A STRATEGY TO ADDRESS CYBERTHREATS WHILE KEEPING THE INTERNET OPEN AND RELIABLE.



> SOLUTIONS <



IN JANUARY OF 2015, NEW YORK'S **BROADBAND PROGRAM OFFICE** BEGAN ITS OWN PUBLIC/PRIVATE PARTNERSHIP PROGRAM TO MORE **QUICKLY DEVELOP BROADBAND** SERVICES IN UNDERSERVED AREAS. THE PROGRAM PROVIDES STATE **GRANT FUNDING FOR PROJECTS** PROPOSED BY INTERNET SERVICE PROVIDERS. THE STATE HAS FORMED PARTNERSHIPS WITH 34 COMPANIES. VERMONT PARTNERED WITH MICROSOFT AND LOCAL SERVICE PROVIDERS TO PROVIDE PUBLIC WI-FI HOTSPOTS TO UNDERSERVED AREAS TOWNS IN RESPONSE TO GAPS HIGHLIGHTED BY COVID-19. ARIZONA IS PARTNERING WITH CISCO TO EXPAND BROADBAND **ACCESS TO HIGH-NEED** COMMUNITIES IN THE STATE.

AT THE STATE LEVEL, CALIFORNIA HAS PASSED ITS OWN CONSUMER PRIVACY ACT, WHICH FOCUSES ON CONSUMERS' RIGHT TO DICTATE HOW THEIR DATA CAN BE USED. NEVADA AND MAINE HAVE FOLLOWED SUIT, PASSING THEIR **OWN PERSONAL DATA** PROTECTION LAWS, AND STATES FROM WASHINGTON TO OKLAHOMA TO FLORIDA ARE **PUSHING AHEAD WITH DATA** PROTECTION LEGISLATION AS OF EARLY 2021. A NUMBER OF STATES INCLUDING NEW YORK, NEW JERSEY, MARYLAND, OREGON, AND TEXAS HAVE ALSO PASSED DATA BREACH NOTIFICATION LAWS.

THE FEDERAL GOVERNMENT HAS BROAD POWERS TO FINANCE PUBLIC INVESTMENTS, WHICH MEANS FEDERAL GRANTS CAN SUPPORT **DIGITAL EQUITY PROGRAMS** COORDINATED BY STATES, LOCAL **GOVERNMENTS, AND TRIBES. MORE** THAN TWENTY STATES HAVE **DEDICATED BROADBAND OFFICES TO** ADDRESS BROADBAND ACCESS AMONGST THEIR CONSTITUENTS. AND MORE HAVE TASK FORCES, WORKING GROUPS, AND **COMMITTEES WITHIN OTHER** AGENCIES. THESE GROUPS BRING TOGETHER A VARIETY OF STAKEHOLDERS, SUCH AS MINNESOTA'S GOVERNOR'S TASK FORCE ON BROADBAND THAT HAS 15 MEMBERS REPRESENTING "COMMUNITIES, BUSINESSES, LOCAL **GOVERNMENTS, EDUCATIONAL** INSTITUTIONS, HEALTH CARE FACILITIES, TRIBES, AND ISPS."

> WHAT YOU CAN DO

MEASURE-

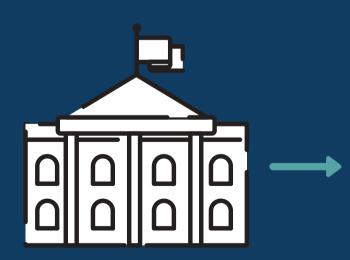
DO YOU KNOW THE STATE OF BROADBAND ACCESS IN YOUR COMMUNITY? WHAT ARE YOUR STATE'S LAWS IN REGARDS TO NET NEUTRALITY? DOES YOUR STATE HAVE A BROADBAND INITIATIVE, OR A TASK FORCE?



WHO ARE THE MEMBERS OF
INITIATIVES OR TASK FORCES
IN YOUR STATE? WHAT STEPS
HAVE YOUR STATE'S OR
COMMUNITY'S ELECTED AND
APPOINTED OFFICIAL TAKEN?

REACH OUT-

FIND ALLIES IN YOUR COMMUNITY
OR IN NEARBY TOWNS AND
ELSEWHERE IN THE STATE. FOSTER
COLLABORATIVE RELATIONSHIPS
WITH LAW ENFORCEMENT, FIRST
RESPONDERS, LOCAL HOSPITALS,
COMMUNITY ORGANIZATIONS,
SCHOOL BOARDS, LIBRARIES, AND
LOCAL BUSINESSES – EVERYONE IS
AFFECTED BY BROADBAND ACCESS



PLAN-

SET SOME
MILESTONES BASED
ON YOUR STATE'S
LEGISLATIVE
CALENDAR.

EXECUTESEE IF YOUR STATE HAS ANY REGULATIONS ON

BROADBAND DEVELOPMENT.

EXPLORE EXAMPLES OF HOW COMMUNITIES ARE INVESTING IN THEIR OWN INTERNET

INFRASTRUCTURE, AND IF YOU CAN APPLY THIS TO YOUR OWN COMMUNITY. SEE IF YOUR AREA IS ELIGIBLE FOR THE USDA'S RECONNECT PROGRAM FOR RURAL DEVELOPMENT.

HARVARD BUSINESS SCHOOL'S DIGITAL INITIATIVE, DUKE DIGITAL INITIATIVE, AND MIT'S INITIATIVE ON THE DIGITAL ECONOMY ARE SOME EXAMPLES OF UNIVERSITIES EXPLORING EMERGING TECHNOLOGIES. SEE WHAT INITIATIVES OR RESEARCH YOUR ALMA MATER OR STATE UNIVERSITIES ARE INVOLVED IN.

